

The Boston Medical and Surgical Journal

TABLE OF CONTENTS

May 1, 1919

ORIGINAL ARTICLES	
A YEAR'S STUDY OF THE MATERNITY WARD AT THE BOSTON CITY HOSPITAL. By Bess Lynde Russell, Boston.	487
ROENTGENOGRAPHY OF THE KIDNEYS. By A. E. O'Connell, M.D., Worcester, Mass.	495
CLOSURE OF SCHOOLS IN EPIDEMIC. By William H. Devine, M.D., Boston.	498
CLINICAL DEPARTMENT	
FIVE CASES OF NEUROSTYLOID ILLUSTRATING SPECIAL POINTS IN STYPTOMATOLOGY AND COEURS. By Abraham Myerson, M.D., Boston.	499
BOOK REVIEWS	
Memoranda on Army General Hospital Administration. Edited by P. Mitchell, M.D.	503
Surgical Applied Anatomy. By Sir Frederick Treves, F.R.C.S.	503
Medical Contributions to the Study of Evolution. By J. G. Adams, M.D.	503

EDITORIALS	
AMERICAN SUBORDINATE AT BRITISH MILITANT ORTHOPEDIC CENTERS.	504
RED CROSS HEALTH MISSION TO ITALY.	505
REMOVAL OF DISABLED SOLDIERS AND SAILORS.	506
ONWALDO CRIST CAMPAIGN AGAINST YELLOW FEVER.	506
SUFFOLK DISTRICT CENSUS MEETING.	507
MEDICAL NOTES.	507
THE MASSACHUSETTS MEDICAL SOCIETY	
TERMINATION OF WAR ACTIVITIES. MEDICAL SECTION, COUNCIL OF NATIONAL DEFENSE.	511
OBITUARIES	
FRANCIS JOSEPH GIBLIN, M.D.	512
CLARK S. GOULD, M.D.	512
EVERETT WHITE, M.D.	512
CORRESPONDENCE	
A LETTER FROM FRANCE. Lieut. David B. Medalla, M.C.	513
MISCELLANY	
NOTICES, RECENT DEATHS, ETC.	513

Original Articles.

A YEAR'S STUDY OF THE MATERNITY WARD AT THE BOSTON CITY HOSPITAL.

BY BESS LYNDE RUSSELL, BOSTON,

Department of Medical-Social Work, Boston City Hospital

Organization of Real Maternity Service in the Boston City Hospital. Prior to October 1916, while a good many pregnant women came to the Gynecological Out-Patient seeking diagnosis and advice, the majority had to be sent elsewhere for treatment during confinement, as there was no adequate care for them in the wards of the hospital.

In October, 1916, a maternity ward of 20 beds was opened, as part of the regular gynecological service.

Time. Beginning with October, 1917, we undertook a social case study of all maternity patients admitted to the ward during a period of twelve months.

Aim. The aim of this pioneer study of maternity as undertaken in a big, municipal hospital was to gain such information as to the nature of the medical-social problems found as might serve for the basis of future case work with similar groups.

Method of Approach. A schedule of suggestive headings was outlined, and each patient admitted to the ward during twelve months was interviewed. When necessary the purpose and need of obtaining the information was explained to the patient, and, almost without exception a full history was cheerfully and freely given. I think this was largely owing to the tactful method of approach on the part of my assistant workers.

Disposition of Intensive Social Problems. Throughout the study such patients as needed intensive or emergency social treatment were dealt with by my assistant, with the exception of the problems involving unmarried maternity and illegitimacy, which were referred to me.

Out of 459 cases studied 219 (48%) were dealt with intensively.

Unrecorded work To many patients we gave some form of social service, which we did not record. A large group whom we referred to the Baby Hygiene Association would be included here. In connection with the visits which were made to each home, a great deal of advice and instruction was given both as regards the mothers and the babies.

Admissions. During the 12 months 465 patients were admitted to the maternity ward, 459 of whom were made a subject of our study (6 were missed during a quarantine for scarlet

fever). The average number per month was 38½. The greatest frequency of admissions occurred during the summer.

Locality. That the Boston City Hospital is fulfilling its object as a municipal institution is evidenced by the following data: Four hundred and nineteen, or 91+%, were admitted from 15 Boston districts, leaving but 8+% suburban and outer state vicinities.

The three districts lying in closest proximity to the hospital contributed 58+% of total admissions; South End, 109; Roxbury, 95; Dorchester, 63.

Length of Stay and Convalescent Care. In analyzing the length of time spent in the hospital ward by each patient, an effort was made to estimate roughly the average period so spent. A chart, here omitted, shows that out of a total of 403 patients, 201 (49%) remained in the hospital only between 10-11 days, 291 (72%) remained 10-14 days, 86 (21%) remained over two weeks.

Short Time Hospital Care, versus Inadequate Convalescent Care. Analysis of the data showed conclusively that many patients remaining for this short time period would not receive adequate maternity care.

Home visits to 164 homes of this 10-11 group showed that while 50% were living under relatively good conditions, 49+% of the patients were unable to cope with the question of adequate post-natal convalescent care.

It is of interest to note that of this group with poor homes, 32% had been previously known to one or more charitable agencies.

Turning to our community resources to supplement this home lack, we find them practically nil. Our Boston City Hospital Convalescent Home does not receive mother and baby, and only one bed available for such care is known to the writer in metropolitan Boston.

Consideration of the civil state of this short period group shows that 39 or 19+% gave birth to illegitimate children. Many of these were young girls, giving birth to their first baby, having had little pre-natal care, and had suffered much mentally and physically in their endeavor to hide their pregnant condition. Many had worked up to the date of labor, often without sufficient food or clothing and without social outlook as they faced discharge from the hospital. The social problem of reaching parents or men responsible, and persuading such to accept this often double responsibility, or of

interesting charitable agencies to provide new homes, can scarcely be well dealt with, in this short 10-11 day period.

If it is fair to assume that labor is often more protracted and severe during first confinement, it may be of interest to note that of 201 cases studied in the short term group, 47+% were confined for the first time.

Need of Longer Hospital Care. Since a 10-11 day maternity period within the hospital implies outside convalescent care in order to complete a satisfactory maternity, and since nearly half of our homes are inadequate to consume this care, with nearly a third somewhat dependent on charity, and our community absolutely lacking in convalescent resources; with less than one-third of our mothers receiving pre-natal care, with nearly 20% of our babies born illegitimate, and with nearly one-half of our patients undergoing confinement for the first time, it is not logical for the hospital social worker facing conditions on the maternity ward to ask frequently for a longer term of hospital care, although realizing to the full the great pressure that there is at the admission desk.

Need of Adequate Community Care. As many patients confined in our ward do not pass through our maternity clinic in the Out-Patient, but apply directly to the ward for admission when in labor, an analysis of the localities from which these patients came was made, with the hope that the District Nursing and Baby Hygiene Associations, who so actively undertake pre- and post-natal work throughout Boston, might possibly see some way to reach more of such cases, especially in the heaviest districts quoted.*

Is there not also a suggestion here for closer coöperation from other charitable agencies throughout Boston, to help Boston citizens to be well born? Maternity Homes, notably the Salvation Army Rescue Home and the Talitha Cumi Home, have generously helped in these emergencies with our unmarried mothers and their babies, but we need more assistance from other maternity homes. Can they not broaden their work when the need is so great? The Society for Helping Destitute Mothers and Infants took many such girls for us last year, but the closing out of that Society in January, 1919, has left our inadequate resources for convalescence more meagre and deplorable than ever

* As I have showed below, 58% of all our maternity patients came from the three districts nearest to the hospital, namely, South End, Roxbury, and Dorchester, and only 8% from outlying places.

in regard to this particular illegitimate group. And for those in the married group! What agencies in Boston can see their way to offer such convalescence? No one is doing this job. Yet we offer a great need which awaits fulfillment.

Pre-Natal Care. In a group of 400 patients admitted to the maternity ward, 262, or 60%, had received no pre-natal care; 18% received such care at our own Out-Patient Department; 17% received instructions from private physicians; less than 1% from other clinics. Therefore only about 36% of the patients in our maternity ward had received pre-natal instruction. This situation ought to be remedied when we realize that over against this low per cent. of pre-natal care are the following facts:

- a. 189 patients, or 42%, of our admission group came for first confinement (presumably a group ignorant concerning the hygiene of pregnancy).
- b. 101 patients, or 22%, admitted having had previous miscarriage.
- c. 18 patients, or 4%, admitted having had more than one previous miscarriage.
- d. 26 patients had babies, still born or died before discharge of mother from hospital.
 1. Of 85% of the babies who died,
 - 62% were premature,
 - 19% were still born,
 - 4% had congenital syphilis.
- e. Of 9 patients who died, over 50% died with maternity complicated by eclamptic or pulmonary symptoms.†

Suggestions. 1. Would posters, advertising the existence and use of our own pre-natal clinic, placed in other clinics frequented by women coming to the hospital, at the entrance lodge, and in the room where relatives consult doctors, bring this pre-natal resource to the attention of prospective mothers, liable to be confined at our hospital, but not attending our gynecological clinic?

Would settlement houses, Associated Charities' offices, children's agencies, etc., in our heaviest districts (South End, Roxbury, and Dorchester) be willing to place such posters conspicuously, for the instruction of their people?

Many of our mothers and babies are referred to the Milk and Baby Hygiene for post-natal care. Is there any way that this Society, in the succeeding months of contact, could tie up

our patients in the coming pregnancies for pre-natal care with the Instructive District Nursing Association, thus insuring such instruction for more of our 60% now without any pregnancy care?

Frequency of Confinement. The statistics gathered concerning the frequency of confinement, plus a slight insight into the frequency of pregnancy, are most superficial. The only value being in their suggestiveness for further study.

Out of the total of 459, in 13 cases information was not obtained. Hence on a basis of 446 patients:

189, or 42%, were confined for the first time.
67, or 15%, were confined for the second time.
34, or 8%, were confined for the third time.
156, or 35%, were confined, on a sliding scale, fourth to fifteenth time.

In regard to miscarriages,
101, or 22%, admitted having previous miscarriage.

21, or 4%, admitted having had more than one previous miscarriage.

Of the 21 admitting more than one miscarriage, the following figures have no scientific value, but are of suggestive interest:

21 patients, admitted 69 miscarriages, an average of $3\frac{2}{3}$, with families ranging from 0-11 children.

15 patients, or 71%, had 2 or 3 miscarriages.

6 patients, or 29%, had 4-6 miscarriages.

Also it was found that mothers having two or three children in this small group, more frequently miscarried.

10 patients, or 48%, having two or three children, admitted 31 miscarriages, or 45% of the entire number (69).

Since 156, or 35%, of our patients are young girls of 19-23 years; since 267, or 61%, of our patients are between 19-28, and since 65% are between 14-28, thus indicating a group with more youthful experience in life, it is undoubtedly true, when correlated with so high an inexperience as 42% undergoing first confinement, 22% admitting miscarriage, and 4% admitting numerous miscarriages, that educational propaganda would not be out of place in our maternity ward, during the latter days of maternity care. Literature on pre- and post-natal care might be intelligently given out by a volunteer worker, who might also have charge of a model layette, for inspection by these

* This represents only 7 months' statistics as other hospital data are not available.

mothers, and possibly with the opportunity of securing materials or patterns, or at least the proper information for securing them, later for themselves.

Racial and Religious Background. In order to better appreciate the needs and desires of our patients it seemed well to get at least a bird's-eye view of the traditions and environment from which they sprang.

Nationalities. Using as a basis of our analysis statistics compiled by the Bureau of Statistics for the Commonwealth of Massachusetts for the decennial census of 1915, we find that they tally very closely with the percentages arrived at in this study, again proving the City Hospital a truly municipal institution.

Massachusetts Statistics. Foreign, 36%; native, 64%.

Survey Statistics. Foreign, 37+%; native, 62+%.

Taking the birthplace of the father with that of the patient, in this group of patients confined in our maternity ward, there were representatives of 29 nationalities. It may be of interest to learn that our American born citizen is the most frequent user of our maternity beds, and those of Irish extraction held second place (121 patients, or 26%).

154 patients, or 33%, were Americans.

131 patients, or 28%, were one generation.

174 patients, or 37%, were foreign born.

Civil State. In the analysis of 463 patients, 79%, or 379, were married (including 3% illegitimate mothers).

20%, or 74, were single.

In studying the age groups of the illegitimate mothers with that of the whole group, it was found that the former grouping fell largely into the age limit (19-23 years), and even exceeded the total so grouped by 42%.

35% in the whole group 19-23 years.

61% in the illegitimate group 19-23 years.

In the calculation of a slightly larger group (18-23 years) were found two-thirds of the unmarried mothers giving birth to more than one illegitimate child. In this latter group of the promiscuous girl only two exceeded the second child. Both young girls had three illegitimate children and several miscarriages. One was a feeble-minded street walker, the other a graduate of a secondary school, and of interesting personality.

Age. Perhaps here might be included a word regarding the age of our patients, also show-

ing comparison of the whole and illegitimate groups:

WHOLE GROUP.

4%	14-18 years
35%	19-23 years
25%	24-28 years
20%	29-33 years
17%	over 33 years

ILLEGITIMATE GROUP.

11%	14-18 years
61%	19-23 years
17%	24-28 years
8%	29-33 years
3%	over 33 years

thus showing the impressive figure.

(Roughly) 63% of patients ranging from 14-28 years and in the unmarried group.

(Roughly) 90% of patients ranging from 14-28 years.

Hence it is clear, both in regard to the married and the unmarried patients, how large a young girl problem we are facing in our maternity ward.

Home Conditions. In the effort to make the home conditions of our patients vivid and of practical value, an enormous amount of data has been worked over, and finally reduced to the following salient facts:

1. A home visit was made to each home in order (1) to gain a general idea of the home from the standpoint of the landlord and the patient; (2) to lend perspective and thus aid in sensing more acutely the nature of the social problems likely to confront us in the oncoming years, thus allowing a more intelligent utilization of existing resources; and (3) a voicing of a need of yet intangible resources awaiting only an interpretation to the benevolently inclined, so as to afford new opportunity for reconstructive aid. For instance, the figures conveying the need of convalescent care were made use of before the publication of this report as an answer to an offer of a well-equipped home for charitable purposes in Boston.

2. The Home from the Landlord's and Patient's Endeavor.

LANDLORD.

42%	good homes
40%	fair homes
18%	poor homes

PATIENT.

55%	good homes
31%	fair homes
13%	poor homes

Roughly estimated, 50% of our patients therefore enjoyed good homes:—the housewives showing a capacity for good housekeeping in excess of their environment.

About 15% of our patients endured poor home conditions, and 35% fair, tending to show that half of our people might not be equipped for pregnancy and maternity, without the aid of charitable help. Surely this emphasizes the needs of maternity care in hospitals.

3. Having gained the impression that more than one-half of our patients were enjoying fairly good homes, it seemed pertinent to gather data as to rent, quarters, number in the family, occupation of the husband, and his wages, in our effort roughly to substantiate this conclusion of self-support among the major group of our patients as well as to illuminate the kind of needs found among those less self-reliant.

4. *Rent.* In a total of 368 patients,

36%	paid \$11-\$15 monthly rental
64%	paid \$11-\$20 monthly rental
14%	paid \$6-\$10 monthly rental
20%	paid over \$20 monthly rental

5. *Number of Rooms.* Out of 406 homes considered,

13%	lived in a single room (largely unmarried mothers).
25%	lived in 4 rooms.
43%	lived in 4-5 rooms.
17%	lived in over 5 rooms.

Hence it is interesting to note that 64% paid \$11-\$20 rent; as over against 65% who occupied 4 or 5 rooms.

6. *Occupation of Patients.* As would be expected, housewives formed the largest occupational group. Based on 458 patients, 74% were housewives. The remaining 26% would be nearly representative of the unmarried mother group amongst whom we find more than half in the domestic and factory occupations.

DATA ON THE FATHERS.

7. *Occupations of Fathers.* Turning to the occupation of the fathers of the babies born in our maternity ward, it was learned in 448 instances that:

52%	did work requiring some skill.
13%	were in the service of the United States.
17%	were teamsters, etc.
10%	were laborers.
8%	miscellaneous.

8. *Age of Fathers.* It seemed of interest to look into the age range of the fathers. Of 420 fathers considered,

28%	were between 24-29
51%	were between 24-35
34%	were under 24
36%	were over 35

Ages of Fathers and Mothers. In comparing the ages of the mothers and fathers in the largest groups we found,

61%	of patients 19-28 years
51%	of fathers 24-35 years

showing that the range of fathers' ages were much older than those of the patients.

9. *Family Budget versus Number in the Family.* An effort was made to work out the family budget in relation to the number in the family, hoping to give a practical idea of the standard of living found within the patients' homes.

The budget was compiled on the basis of the father's wages plus the amount contributed by other members of the family, and also in relation to those known to charitable agencies.

352 budgets were studied.

312 proved to be apparently complete budgets.

40 proved to be incomplete.

a. Of the 40 incomplete budgets 55% were known to charitable agencies.

b. Of the 312 apparently complete budgets 18% were known to charitable agencies, three-fifths of whom were chiefly unmarried mothers.

Leaving therefore (exclusive of the unmarried group) 273 patients, of whom only 7% were known to charitable agencies.

10. *Number in Family.*

40% were members of the 2-3 family group.

11% were members of the one-family group.

25% were members of the 4-5 family group.

23% were members of the 5-family group.

Hence 65% of the patients were members of the 2-5 family group.

11. *Average Budget versus Average Number in Family.* The next logical step seemed to be the analysis of the "number in the family" by the family budget, and it was found that the average budget was \$22 per week among 202 patients, or,

64% of patients studied had average budget of \$22 per week.

8% of patients studied had average budget of over \$25 per week.

By excluding the unmarried mother group and the 7% known to charitable agencies, it leaves 56% of our patients self-supporting on average budgets ranging from \$21-\$32.

Since of the 40 incomplete budgets, 18 were unknown to charities, it is probable that some of these were also self-supporting; also it is probable that some patients previously known to charitable agencies were self-supporting while in our maternity ward. Hence it is probably a conservative estimate to say that about 60% of our patients were probably self-supporting.

Helpful Comparisons: Self-Support versus Home Conditions. Having made the contention that about 60% of our patients were self-supporting, the following comparisons tend to substantiate it:

60% self-supporting as compared with 55+% living under good home conditions.

60% self-supporting as compared with 50% paying rent over \$16 month.

60% self-supporting as compared with 60% living in 4 rooms or more.

60% self-supporting as compared with 52% of patients' husbands doing skilled work.

Hence 55% good homes, the 50% paying substantial rent; the 60% living in larger quarters; the 52% having skilled husbands tallies so closely with our rough estimate of 60% self-supporting, that it is probably fair to conclude that over half of our patients on our maternity ward come from homes maintaining themselves in comfortable independence.

12. *Patients Known to Other Charitable Agencies.* Having analyzed the self-reliant group, it might be well roughly to sum up the outstanding points among the more or less dependent patients. On a basis of 459 patients,

33% had been previously registered as known to 57 charitable agencies.

An analysis of the agencies show that out of 50 used,

20 were representative of medical service.

22 were representative of rehabilitation service.

6 were representative of correctional service.

3 were representative of legal service.

1 was representative of patriotic service.

Therefore, an analysis of the statistics show that,

46+% were known for medical or patriotic reasons.

43% were known for cruelty or family reasons.

The agencies most frequently used were,

Instructive District Nursing Association	30 times
Associated Charities	30 times
Red Cross	16 times
Overseers of the Poor	15 times
Society for Prevention of Cruelty to Children	12 times
Baby Hygiene Association ..	11 times

Under the groupings (medical and patriotic) and (cruelty and family) in the former group, the majority were usually known to but one agency, while those in the latter group were oftener known to many agencies.

Hence it would appear that of the 33% known to other charities that one-half, or

16 $\frac{1}{2}$ % were known for medical or patriotic reasons

16 $\frac{1}{2}$ % were known for cruelty or family reasons

Considering for a moment this latter group, those seeking material aid, it is again seemingly substantiated by our figures on poor homes, small rentals and inadequate quarters.

16% needed rehabilitation as compared with 13% living in poor homes

16% needed rehabilitation as compared with 14% paying \$6-\$10 month rental

16% needed rehabilitation as compared with 13% living in a single room.

Would it then be fair to assume from the

above statistics regarding home conditions that, (roughly)

60% of patients self-supporting

33% of patients somewhat dependent on charity

½ for medical and patriotic reasons

½ for cruelty and family reasons

7% of patients were unknown

SOME SOCIAL SNAP SHOTS.

The Girl Lodger with Syphilis. Ida May was sent to an industrial school at 13, at the time her widowed mother was sentenced to "jail" for promiscuous conduct. In the industrial school Ida May received secondary educational advantages, while also accumulating much that was degrading from her other unfortunate companions. After seven years of repressed institutional life, she was "let loose" in our South End lodging district, companioned only by her sister, also an institutional product, and by now a street walker. In this eleven months our patient had had a still born baby and had acquired syphilis.

What could we do to help? Finances to cover partial cost of treatment were secured from her home State (outside of Massachusetts) and that treatment has been regularly and faithfully followed for the past 16 months. A safe guarded environment, new friends, wholesome recreations, "lifts" in times of trouble, and friendship have helped to make a balance wheel for our girl lodger.

The Fourteen Year Old Mother. Gifts of candy and ice cream offered by a man of 40 contributed towards the motherhood of one little high school student of 14. A tubercular mother, a miserly father, a sister also an unmarried mother at 17—proved too frail a protection for the girl mother. Friends of her own faith were found who interested themselves and were able to provide convalescent care for both mother and baby, later boarding the baby in a foster home. Our patient was then returned to high school life while the father of the baby was arrested and imprisoned on a charge of statutory rape.

A Successful Belated Marriage. Mary's mother died when she was 12 years old, leaving her to the kindly care of her father who was,

however, a bit too fond of his "glass." She had had few advantages, yet had chosen decent companions and had sustained a good reputation. While keeping house for her father without supervision, she received for 4 years attentions from a self-respecting lad, whose family prided themselves on maintaining superior social standards.

At 19 Mary became pregnant, but marriage was debarred through the influence of the boy's sisters, who persisted in the idea of their social superiority, even procuring counsel to fight the girl's bastardy charge.

Mary was dependent, clinging, lacking the power of self expression, as did also her fiancé. Hence the interference by an outside force was necessary to combat the dominant influence of the sisters, before the real desires of the young people could be realized and their child safeguarded. Fifteen months of happy married life proves that our social coöperation was of wholesome value.

The Feeble-minded Prostitute. Jennie's family were all respectable and self supporting, yet at 10 our patient was found to be promiscuous with young boys, and on admission to our hospital, in her young womanhood, had had 3 babies and several miscarriages.

Court fines and imprisonment had proved useless in checking Jennie's career. A Binet test, resulting in the diagnosis of feeble-mindedness, made during her incarceration in prison, rendered it possible to hold this girl after a recent arrest in a vice raid through the court, in detention houses, pending permanent care in one of our State Schools for Feeble-minded. Both Jennie and the community which she leaves will profit by this enforced segregation.

CONCLUDING REMARKS.

A Municipal Job. This study has demonstrated how truly our hospital is doing its municipal job:

1. Our cosmopolitan intake is almost identical with the Massachusetts census for 1915 in regard to native and foreign born.
2. Our Boston residents range well over 90%.
3. Nearly three-fifths of our patients come from our neighboring localities.
4. Our meagre 20 beds have harbored almost 500 patients within the year, or an average of 38 per month.

5. A good out-patient clinic provides adequate pre-natal instruction.

A Need Only Partially Filled. The urgent need of adequate supplementary post-natal care is also demonstrated.

The Nature of Our Problem. One of the chief aims of this study was to determine, largely, the nature of the medical social problems found in our maternity ward.

MEDICAL.

The study demonstrates that medically a large proportion of the patients are normal maternity cases. The complicating diseases, such as eclampsia, pulmonary troubles, venereal diseases, and mental defects, plus the reactions on the unborn infant, including a significant premature group, suggested largely preventable causation through avenues of pregnancy hygiene and better living conditions.

SOCIAL.

To gain an accurate idea of the social problems presented, our intensive maternity cases for the year were reviewed (nearly half of the total 452 admissions) and the following problems were noted:

1. Need of post-natal care—in at least 50% of cases.
2. Need of pre-natal care—in at least 60% of cases.
3. Family problems, including, in 53 instances, desertion, widowhood, incompatibility, dependency, motherlessness.
4. Unmarried maternity—in 101 instances.
5. Pathological conditions—in 28 instances.

Illegitimacy. Perhaps a little further insight into our most subtle social problem, the unmarried mother, might be of interest. The following percentages suggest some of the situations involved:

- 25% had 2 or more illegitimate children, two-thirds of whom were in the age group 18-23 years.
- 5% were married with illegitimate children.
- 9% had syphilis.
- 5% had gonorrhea.
- 8% were feeble-minded (by test).
- 17% had babies die at, or soon after, birth.

In regard to the social disposition of this group,

84% received outside charitable aid through our assistance.

16% were readjusted to their environment.

28% of unmarried fathers were dealt with, six-sevenths of whom gave some financial assistance.

From the viewpoint of our social activity, 82% received intensive attention from the workers.

39% are still in touch with the workers.

41% were ultimately transferred to other charitable agencies.

48 different agencies is a minimum estimate of coöperating usefulness.

a. Those most often used are named:

1. Milk and Baby Hygiene.
2. Church.
3. Society for Helping Mothers and Babies.
4. Associated Charities.
5. State Alienists.
6. State Board of Charity.

Outstanding Needs Awaiting Reconstruction. By briefly summarizing the analysis of the data, the following facts were found to be reckoned with (roughly speaking):

½ of the 459 received but 10-11 days' hospital care,

- a. With ½ of their homes inadequate for supplementary convalescence.
- b. With no community convalescent resources available.
- c. With one-third of the patients somewhat dependent on charity.

One-fourth of our patients were illegitimate mothers.

One-half of our patients were facing first confinement at often a youthful age.

One-fourth of our patients admitted previous miscarriage.

Three-fifths of our patients had no pre-natal care, and probably a majority of the mortality in our mothers and infants was due to preventable causes.

Reconstructive Suggestions. Since our patients largely fall in a youthful group, it is safe to say that much can be done for them, by educational propaganda work, in relation to

(1) pre-natal, and (2) convalescent care, (3) in relation to unmarried maternity, and (4) venereal disease.

Pre-natal care could be brought to the attention of more pregnant women by advertisement of our pre-natal clinics:

1. In our hospital clinics and consultation rooms.

2. In offices of our coöperating charities, especially in our neighborhood districts.

3. By suggestion to the Instructive District Nursing Association and Baby Hygiene Association, who are closely associated with mothers and babies.

4. By distribution of literature on the ward.

Pre-natal care could be more often realized:

1. By request for longer stay on ward in particular cases.

2. By requesting the opening of a ward for mother and babies at our City Convalescent Home.

3. By wider use of our maternity home for the unmarried group.

4. By appealing for the opening of new convalescent homes by the benevolent.

5. By distribution of literature.

6. By presenting model layettes on the ward, with instructions.

Placing out care might be extended:

1. By appealing to existing agencies to widen the scope of their work.

2. By interpreting the need, stimulate the growth of new endeavors.

Venereal Disease might be diminished:

1. By close coöperation with the State Board of Health, thus maintaining continuous treatment for gonorrhea and syphilis.

2. By education of the individual.

The problem of unmarried maternity might begin to face solution:

1. By recording background data and psychological insight through intensive records, thus compiling material suitable for causative and constructive research study.

2. By personal service help some unmarried mothers in their effort to make their greatest contribution as citizens.

And the last suggestion might be—to keep a balanced point of view in facing our maternity work, and while remembering our many serious problems, and while earnestly appealing for more adequate coöperation from our com-

munity resources, and while appealing for new avenues of reconstruction to be opened for our patients, we might also recall the optimism indicated by rather substantial comparative proof, that at least 60% of our patients are receiving adequate maternity care, and are maintaining apparently stable home conditions, wherein to rear the citizens born at our Boston City Hospital.

ROENTGENOGRAPHY OF THE KIDNEYS.*

By A. E. O'CONNELL, M.D., WORCESTER, MASS.

Roentgenologist, St. Vincent Hospital.

A ROENTGENOGRAM is a record of densities. The kidneys, with their surrounding fat, are much denser than the other tissues of the body and therefore can be shown in a modern roentgenogram. They cast bean-shaped shadows on each side of the spine opposite the twelfth dorsal and three upper lumbar vertebrae. The shadow of the twelfth rib crosses the renal shadow at the juncture of its middle and upper thirds and the hilum of the kidney is on the level of the second lumbar vertebra and is about two inches from the midline of the body.

Before making a roentgen examination of the urinary tract it is very important that the patient's intestines be free from feces and gas. Gas is very transparent to the rays, and causes dark areas in the roentgenograms, which hide the kidney shadow. The preparation should be the same as for a major operation. The patient should receive two ounces of castor oil the night before, no food and a large cleansing enema the day of the examination.

The entire urinary tract should be examined in all cases. There are many reasons why this should be done. Calculi are frequently found in both kidneys; a stone may have passed down into the lower ureter or bladder; the presence of a kidney on the opposite side can be shown, which information is valuable to the surgeon if it becomes necessary to remove one kidney.

The majority of the patients coming to the roentgen laboratory for kidney examination are sent by their attending physician to determine the presence or absence of calculi. The reader believes that all calculi except those of the pure uric acid variety (which are very rare

* Read before the Worcester District Medical Society, Feb. 12, 1919.

and may be ignored) can be shown in a roentgenogram which gives the following detail: shadows of the last two ribs, the psoas muscle, the transverse processes to their ends, and the outline of the kidney. This detail can be obtained in nearly all cases. A roentgenogram of a very stout patient may fail to disclose the presence of a small stone. This is due to the lack of contrast between the shadow of the small stone and the shadows of the other tissues of the body in such a patient. These small calculi are usually non-surgical stones. Nearly all renal calculi are of mixed variety. Their shadows vary in density according to the predominance of the elements. The oxalic variety gives the densest shadows, the phosphatic next, and lastly the uric acid variety.

Symptoms of renal calculi vary with the location of the stones and the amount of occlusion which they cause. A stone in the body of the kidney or stone in the pelvis of the kidney which does not cause obstruction may give only symptoms of dull aching pains in the lumbar regions. When the stone causes occlusion, the patient suffers from renal colic. The pain is first felt in the lumbar region and descends down the line of the urinary tract. Attacks of renal colic may occur at intervals varying from a few minutes to hours. Frequent micturition is often a prominent symptom. A small stone may be in the lower ureter for years and cause but slight discomfort at times. The urine usually contains blood, albumen, and pus cells. If the stone causes complete occlusion, the urine, of course, may be negative.

Shadows of renal calculi must be differentiated from shadows cast by other dense tissues of the body. Errors in roentgen diagnosis of calculi are nearly always errors of interpretation. It is not difficult to show the shadows of calculi—the real difficulty is the differentiation between shadows. Kidney stones must be differentiated from gall stones, calcified mesenteric glands, masses of feces and foreign bodies in the intestine, increased ossification of the transverse processes of the vertebrae, and from the shadow of a skin tumor of the back. The pelvis of the kidney and the gall bladder are on the same level in the body. Therefore the shadow of a kidney stone and a gall stone may occupy the same position in a single antero-posterior roentgenogram. To determine whether the stone is in the kidney or gall bladder, either a lateral roentgenogram or stereo-

roentgenograms, which give perspective, must be made. To differentiate between a kidney stone and a gall stone is usually not difficult but requires considerable time and work. The shadow of a kidney stone is of uniform density, while that of a gall stone has a ring-shaped appearance, due to the greater density of the outer layer of the stone. A kidney stone gives a smaller and clearer shadow if the roentgenogram is taken with the plate at the back, while gall stone is smaller and more distinct with the plate at the anterior wall of the body. Lateral roentgenograms, if they show the shadow, are usually a sure means of differentiation between a gall stone and a kidney stone. Unfortunately the shadows of small calculi cannot always be shown in a lateral plate. Stereo-roentgenograms (plates taken from different angles and viewed in a stereoscope to give perspective) are of great value in such cases. The reader has had one case in which he could not positively say whether a shadow was cast by a gall stone or kidney stone. The probable explanation of this difficulty in the above-mentioned case was the close proximity of the kidney and gall bladder. Calcified mesenteric glands cast bright shadows which must be differentiated from the shadows of calculi. The shadow of a calcified gland has a general appearance of mottling, with lack of central density. The shadow of a kidney stone is of uniform density. A lateral roentgenogram of a calcified mesenteric gland will show the shadow anterior to the usual location of a kidney stone. Masses of feces and foreign bodies in the intestines can be ruled out if the patient has been properly prepared. If there is any doubt as to the diagnosis, a second preparation and roentgen examination will settle this. The shadow of a calculus superimposed upon that of a transverse process must be differentiated from a shadow due to increased density of the end of a transverse process. The latter condition is usually seen in a number of processes. A roentgenogram taken from a different angle will change the relative position of the calculus, while this will not result in the case of increased density of a transverse process. The reader has had one case and seen another reported where a shadow that might be interpreted as a calculus was cast by a pedunculated skin tumor of the back. Removal of the growth resulted in the disappearance of the shadow. Stereoscopic roentgenograms will, of

course, enable the roentgenologist to differentiate between these two conditions. A careful inspection of the patient's back should always be made previous to taking a roentgenogram of the kidney.

Most renal calculi can be positively diagnosed from the shape and character of their shadows in a roentgenogram. When there is any doubt as to the cause of a shadow, the roentgen findings should be confirmed or disproved by a cystoscopic examination and if necessary, by means of pyelograms. A scratch on the wax-tipped ureteral stilet or catheter furnishes definite and reliable proof of the presence of a stone. Pyelograms, roentgenograms taken after the injection of a solution opaque to the roentgen rays into the ureter and pelvis of the kidney, are of great aid in clearing up doubtful cases of renal calculi. The size, shape, and position of the ureters, pelvis of the kidney and calices can be shown. One can, of course, rule out a calculus if the pyelogram shows that the shadow of a suspected stone is not in the course of the urinary tract. However, the fact that the suspected shadow and the shadow of the opaque solution are superimposed upon each other in a plain roentgenogram does not prove that it is cast by a stone. Either stereoscopic or lateral pyelograms are necessary to give this information. Pyelograms are of value in demonstrating a dilated ureter above a stone. Hydronephrotic sacs, which are frequently found in cases of renal calculi, can be shown by this method. Dangers of pyelography, in the hands of experienced urologists, are very slight. In 200 consecutive cases at the Urological Clinic of Johns Hopkins there were no bad results. There are today no dangers from poisoning or from over-distention of the ureters or pelvis of the kidney. Some authorities say that pyelography is contra-indicated if the urinary bladder contains infectious germs.

In a case of suspected renal stone the reader believes that after a good history has been taken and the urine examined the patient should have roentgenograms made of the entire urinary tract. Then, if there is any doubt as to the interpretation of a shadow of a suspected calculus, the patient should be cystoscoped and pyelographed to confirm or disprove the roentgen findings. The reader knows of nothing in medicine so unreliable as a kidney history. A case may have a negative urinary-

sis and negative roentgen findings and yet the kidney be the organ involved. Conditions other than calculi give symptoms of renal stone, such as hydronephrosis or obstructions of the ureter from other causes. If pyelography were used more extensively, the roentgenologist would not be blamed so often for not showing a stone when none exists.

A prolapsed kidney can be shown in a roentgenogram. With the usual position of the roentgen tube, the lower pole of the kidney shadow is at the level of the transverse process of the third lumbar vertebra. If the kidney shadow is seen in a different position, the kidney is displaced. Pyelograms are also very useful in demonstrating this condition. Only the outline of the kidney can be shown in a plain roentgenogram, whereas in a pyelogram the shadow of the pelvis filled with the opaque solution can be plainly seen.

Tuberculosis of the kidney is a comparatively frequent disease and is one of the first conditions to be suspected when a roentgen examination is negative for calculus. Renal tuberculosis gives roentgen findings when there is a calcification of the kidney tissues. Calcification, however, does not take place in the early stages of the disease. Roentgen diagnosis of renal tuberculosis can be made when the roentgenograms show calcified material scattered throughout the kidney shadow. The reader first made such a diagnosis from a roentgen examination in 1910. The patient had a large palpable abdominal tumor which the roentgenogram showed to be an enlarged kidney. Shadows of calcified material were seen in the lower pole of the kidney shadow. Operation confirmed the roentgen findings. Soon afterwards a second case was referred to the reader for Roentgen examination. Frequent micturition and macroscopic blood in the urine were the only clinical findings. The roentgenograms were negative for calculus but showed the shadows of calcified material in the right kidney. A diagnosis of tuberculosis of the right kidney was made and later confirmed by operation.

While plain roentgenograms may show an enlargement of the kidney shadow and displacement of the hepatic or splenic flexure of the barium-filled colon, they are of little value in the diagnosis of renal tumors. Pyelograms are of great aid in these cases by showing the encroachment of the renal tumor upon the pelvis

of the kidney. The value of pyelography is emphasized by the fact that the appendix has been removed in 45% of cases of right-sided hydronephrosis.

The welfare of the patient demands coöperation in diagnosis. The roentgenologist is the consultant of the attending physician. He makes observations and draws conclusions from roentgen examinations and gives these to the attending physician to use to produce efficiency in medicine.

CLOSURE OF SCHOOLS IN EPIDEMIC.

By WILLIAM H. DEVINE, M.D., BOSTON.

Director of Medical Inspection, Boston Public Schools.

THE closure of schools is a moot question that has caused wide discussion.

For a proper understanding of the subject, a brief outline of the cause of spread of disease in school is essential.

The consensus of expert opinion is that direct contact is a potent factor in the transmission of contagious diseases in school: using the same books, pencils, etc., sharing sweets, contact in play, sneezing, coughing, etc.

The vitiated atmosphere of a badly ventilated, crowded car or room would be included in direct contact. The writer does not believe that the child exposed conveys the disease unless there is contact.

A prolific source of contagion is the pupil who attends school during the stage of incubation. Before the case is diagnosed, he may spread the germs to other members of the class.

The advantages claimed for closure of schools are:

(a) The elimination of contagious disease by direct contact in walking or riding in crowded cars, to and from school, and in the classroom;

(b) The improved health of children from outdoor recreation;

(c) The opportunity presented for fumigation of infected buildings.

The advantages of keeping schools open during epidemics are:

1. The daily assembling of pupils in classroom insures thorough inspection by medical inspection forces (doctors, nurses, teachers) and prompt detection of cases presenting signs or symptoms of communicable disease;

2. Many children temporarily removed from homes in which there may be more danger from infection by direct contact than there would be in attending or traveling to and from school;

3. Timely advice given in school on prevention of the disease;

4. Rigid school discipline tends to prevent contagion by direct contact;

5. Moral, mental, and physical welfare of children maintained in school;

6. Children not attending school are free to attend moving pictures and other public meeting places.

For the pupils of high and other schools obliged to travel by car, the danger of infection is increased by the vitiated atmosphere that obtains in certain conveyances.

It is conceded that the child from the model home, where every intelligent effort is observed for the prevention of disease, is somewhat safer than the child attending school.

A school without the advantages of medical inspection may be justified in closing during an epidemic. But even here the intelligent supervision of the teacher would aid in controlling the situation.

Under certain conditions, which rarely occur, the closing of schools is advisable.

This was apparent in the late epidemic of influenza. Two or three weeks after the visitation of this malady in Boston last fall, the city was in a demoralized condition. Thousands of pupils were absent from school, either from illness (many with influenza) or safeguarded at home. Over two hundred teachers were absent, some ill from the disease, some from fear, and others on account of illness or bereavement in their homes. Medical inspectors, overworked, were affected by the disease in the same proportion as other members of the community; perhaps twenty per cent. of the nurses in Boston were on the sick list, and thousands of families were afflicted by the disease and quite a few by death.

Owing to this condition of affairs and a panic stricken community, the director of medical inspection recommended the closure of schools. It is the first time in his experience as a school physician, or general practitioner, that he has seen the need of such action, and would pursue the same course in a similar emergency.

Under the conditions stated, the closure of schools would be justified even in a city with an efficient system of medical inspection.

It seems but logical that moving picture houses should be closed, at least to children, when it is considered necessary to close schools. The moving picture house, while it offers some advantages in educating people on the prevention of disease, certainly offers exceptional opportunities for its spread. The crowding of children awaiting admission, coughing, sneezing, applauding, and close contact of audience, all favor the transmission of disease.

To summarize: With proper medical supervision, such as obtains in the Boston schools, children are safer in school; the daily medical inspection and supervision of nurses and teachers are powerful preventive factors. Children remaining at home during epidemics do not have this systematic inspection and comparatively few have medical advice, with its early detection of contagious disease. The discipline of the school prevents the close proximity of the students and the alert teacher is quick to detect the early symptoms of disease.

The ordinary child is safer from contagion if attending school during an epidemic, incidentally losing no schooling.

Clinical Department.

FIVE CASES OF NEUROSYPHILIS ILLUSTRATING SPECIAL POINTS IN SYMPTOMATOLOGY AND COURSE.

By ABRAHAM MYERSON, M.D., BOSTON,

Assistant Professor of Neurology, Tufts College Medical School; Chief Medical Officer, Out-Patient Department, Psychopathic Hospital, Boston.

THE following five cases are reported because they represent somewhat unusual and yet rather important phases of neurosyphilis. The first case deserves attention because it points out the importance of the spinal puncture. It is very well known that the spinal fluid may be positive to the Wassermann test for syphilis where the blood is negative. But in this particular case, the blood remained negative during many examinations while the spinal fluid was constantly positive. The second case is noteworthy because the Brown-Séquard syndrome appeared in almost classic purity. Moreover, the spinal fluid showed the xanthochromia syndrome. The third case is one in

which a mental disease apart from the neurosyphilis manifested itself almost as if the neurosyphilis were not present while the neurosyphilis itself gave practically no symptoms. The fourth and fifth cases are important because they affect a brother and a sister. The brother, a paretic, clinically, was treated and had a fine remission of clinical symptoms, but the spinal fluid was unchanged. The sister, presenting none of the signs of paresis, was treated for a long time for orthopedic symptoms. She presented in her spinal fluid the syndrome of paresis. All together, these cases form a group which, though each is individual and unusual, is characteristic of neurosyphilis in the wide range of symptoms presented.

CASE 1. Taunton State Hospital, Out-Patient Department, No. 6. A white male, aged 40, married, with two healthy, living children. Wife well. One miscarriage, the second pregnancy. Patient was a confirmed alcoholic and rounder up until the time of his marriage, thirteen years before. Since then, occasional sprees. Six years before examination in October, 1906, he commenced to have stiffness of the legs with occasional twitchings. Vague paresthesiae, occasional sharp pains. The stiffness, paresthesiae, and pain came and went, as the patient put it, for about a year, and gradually the stiffness became more prominent. Stiffness became more marked until the patient was hardly able to walk. The pain disappeared, but now there was a continuous numbness in the legs. Difficulty with the bladder and bowels appeared. Some incontinence, but mainly difficulty in starting the stream and constipation. Sexual power disappeared at the end of two years. The arms became involved. He was formerly an expert wheelwright and mechanic. He became clumsy, easily fatigued, and then noticed a paralysis, especially of the hands. He was in the hands of several physicians, each of whom took his blood for examination, and on each occasion it was reported negative by the State Laboratory. His condition gradually grew worse, the muscles of the back became affected, and it was impossible for him to sit erect without bracing his back against the back of a chair. There was no difficulty in swallowing, no involvements of any of the functions associated with the head.

Physical Examination Summarized. A spastic paralysis of legs with double Babinski,

ankle clonus, very active knee jerks and almost complete loss of voluntary function. Moderate diffuse diminution of all modalities of sensation. Cremasteric and abdominal reflexes absent. Weakness of muscles of the back and weakness of all abdominal muscles likewise. No capacity for moving arms and shoulders. Slight power of flexion of wrists and elbows. Very little movement of fingers. Slight atrophy of the interossei. Diffuse sensory loss in upper extremities. Cranial nerves: There is slight difference in size of the pupils, the right being larger than the left, both irregular and reacting somewhat to light, better to distance. Aside from this, no cranial nerve involvement.

Blood negative to the Wassermann reaction for syphilis and negative on six other occasions tested during the treatment. Spinal fluid—excessive albumin (++), globulin present ++, cell count 20—mainly small lymphocyte, one endothelial cell. Wassermann in spinal fluid ++. Diagnosis of syphilitic myelitis was made and treatment undertaken by the Swift Ellis method and by the intravenous as well. When the patient had received some thirty treatments, there was but slight progress made, but the disease seemed, on the whole, arrested; and at the end of a year and a half, when treatment was discontinued by the patient, there had been essentially no change. During all this time, as has been stated above, the Wassermann test in the blood remained negative, that is to say, no provocatory Wassermann ever occurred. The spinal fluid Wassermann remained positive, *i. e.*, was not changed. This is rather unusual in a case so well treated and can be explained only by the statement that the pathological condition was but little influenced by the treatment.

CASE 2. The Brown-Séquard syndrome, as is well known, consists essentially of a spastic paralysis occurring on one side (corresponding to the side of the cord in which the lesion exists) and anesthesia of the other side of the body (corresponding to the non-involved side of the cord). Sachs, in his article on syphilis of the nervous system, barely mentions the syndrome as occurring with syphilis. Southard and Solomon, in the book on nervous syphilis, do not mention it at all. Nonne gives quite an extended account and says that syphilis of the spinal cord manifests itself very often under the form of unilateral lesion. Petran, in 1902, was able to collect thirty-four cases of

the spinal syphilis which presented the Brown-Séquard syndrome. However, he states that the unilateral lesion will not be presented in the purity in which we see it after injuries, hemorrhages, and in non-syphilitic tumors.

Case History. Patient seen in consultation with Dr. T. E. A. McCurdy. Is an unusually powerful negro of 42. A porter by occupation at the present time, and formerly a seaman. He denied syphilitic infection, though willingly admitting gonorrheal infection five years before. Six months previous to the time he was first seen, January, 1919, he commenced to complain of pain in the back, somewhere in the upper part of the lumbar curve. This pain was almost continuously consistent and increased gradually. It remained the only symptom, except for a slight difficulty in passing his water, occasionally priapism, and then diminution of sex power, for about two months, when a peculiar symptom manifested itself. He noticed that when he sat down on an iron seat, that the right side of his body would not feel the cold of the seat, whereas the left side did. Gradually this became more marked and he noticed, in addition, numbness of the right leg. This continued for about four weeks. For about a month before consultation, he noticed that he stumbled occasionally because of a clumsiness of the left leg. This did not concern him much because of its relative insignificance, until a week before consultation, when it became so marked that he found himself unable to control its movement and unable to work.

Physical Examination Summarized. The upper part of the body, including the chest and arms, showed nothing of any importance. The left leg was spastic, presented greatly increased reflexes with moderate ankle clonus and suggestion of a Babinski sign. There was no loss of sensation whatever and the cremasteric and abdominal reflexes were present. On the other side, the right, there was no paralysis, almost complete loss of pain, touch, deep pressure, heat and cold discrimination up to finger's breadth above the umbilicus. The line of demarcation for pain and thermal sensibility was somewhat lower down than that of the touch and pressure sensibility, which latter corresponded to about the tenth dorsal segment. There was no definite zone of hyperesthesia, though this should be present in the classical Brown-Séquard paralysis. The skin reflexes were normal on this

side. The tendon reflexes were very active, but not as active as upon the other side. No Babinski sign. Blood not examined. Spinal fluid showed the following under pressure: tinged yellowish (xanthochromia) albumin +++, globulin ++, cells fifteen, mostly lymphocytes, gold showed 0001210000. (This particular gold sol was not as sensitive as it should have been). Wassermann in spinal fluid positive.

This syndrome the patient presented was classically a Brown-Séquard paralysis. The xanthochromia was so marked that before the Wassermann came back positive, the provisional diagnosis of tumor of the cord was made. K. I., however, was prescribed. With the positive Wassermann reaction, the patient was immediately put on very active treatment. He received ninety drops of saturated solution of potassium iodide, three doses a day, and was given $\frac{1}{10}$ grams of diarsenol. It was intended to put him on Swift Ellis treatment, but he responded so well to the first diarsenol injection and to the K. I., that it was determined to try this out first. The diarsenol was repeated every three days for eight doses and at present he is receiving one injection every two weeks. Later, after the diarsenol was started, mercury was given in the form of the salicylate intramuscularly. The clearing up was very prompt and gratifying. Almost immediately the pain disappeared, to the great joy of the patient. Then steadily and continuously both the sensory and motor disturbances receded. It is impossible to determine that any form of sensation recovered more rapidly than the others. The sensory disturbance disappeared from above downwards, that is to say, it seemed as if the upper lumbar segments first showed normal sensation, then the lower and the sacral. The skin reflexes returned after the third injection of diarsenol. Spasticity disappeared gradually until at the end of the third week of treatment the patient was using his leg in a manner approaching the normal, except when fatigued or in a hurry. The spinal fluid was re-examined on the third week. The Wassermann had become negative, the cells dropped to normal, there was a slight excess of albumin and a slight globulin. The gold sol was negative. No xanthochromia.

Of value in this case is, first, the occurrence of the Brown-Séquard syndrome with xanthochromia. The xanthochromia syndrome, on the whole, shows pressure with probably capil-

lary bleeding into the spinal fluid. The early occurrence of pain and the fact that the sensory functions were first disturbed, indicates that the disturbance proceeded inward from the meninges; second, the case illustrates a safe rule of procedure in the treatment of syphilis of the nervous system, which is, that before Swift Ellis or intraspinal is used, intravenous should be tried. If the intravenous proves unsuccessful, then the intraspinal method is indicated.

CASE 3. Taunton State Hospital Case No. 7. This patient presented an almost pure manic depressive psychosis with free intervals. At the same time, the physical signs, blood and spinal fluid indicated paresis. At no time, however, in free intervals, was there anything that indicated the parietic process. At first, it was very difficult to decide whether or not the mental symptoms related to the syphilitic infection. It is to be noted that the mental symptoms disappeared without treatment, that they followed the usual course of manic depressive insanity, and furthermore, that an uncle of the patient had been in the Taunton State Hospital with manic depressive insanity and that there is strong neurotic taint throughout the family.

Case History, in Brief. The patient, a man of 42, of distinguished American ancestry, himself a professor of Greek in a well-known Eastern University, entered the hospital from the Boston State Hospital. He had been under observation there and at the Psychopathic Hospital. He is single and had lost one leg in a railroad accident when he was 14 years of age. He acquired syphilis at the age of 21. He received three years of mixed treatment at the hands of competent men. The onset of his symptoms dates back to the spring of 1915, when at the closing of the teaching year, he noticed fatigue and a gradual oncoming depression. This depression became heightened into fear, when he noticed a rash on his body which he took to be syphilitic. He was assured that it was not and went abroad, as was his custom, to study a language in some European country. This year he selected Spain. On the trip, which he took with a professor of medicine from an Eastern university, the latter noticed the increasing melancholia of his companion and tried to get him to go home. He separated from his companion, became deeply depressed, and was finally steered home by friends. When

he reached home, the depression reached the point where he felt that all his body was poisoned with syphilis and he contemplated suicide. He became abstracted, that is, refused to eat or change his clothes, and was sent first, to the Homeopathic Hospital, and later to the Psychopathic. When he reached Taunton State Hospital, after a stay in the Boston State Hospital, he was deeply depressed, retarded, untidy, and had to be fed. The physical examination showed irregular pupils which reacted very little to light and the tendon reflexes were very active. No other disturbance noted. The Wassermanns in spinal fluid were positive. There was an increase of albumin and globulin and an increased cell count. Gold sol not done at that time. At the end of three months, he cleared up, went home, and started to teach again in another university. After teaching about six months, during which time he was only moderately efficient, he began to get restless, excited, talkative, and was sent back to the hospital. In the hospital he was obscene in a very witty fashion, told scandalous stories about nurses and doctors, talked incessantly of a philological research, was destructive and untidy and would have been exceedingly difficult to manage, were it not for the fact that he had one leg. Unfortunately, he fell out of bed and fractured his femur and this necessitated a plaster cast. After a long period of typical manic excitement, he recovered and is now at Taunton State Hospital acting as librarian, making indexes and catalogues. His memory shows no defect. He has an extraordinary stock of information on all manner of subjects, speaks practically all the languages of modern Europe, except the Slavonic, and is an authority on the History of Art. His physical signs have not changed in the least. The blood and spinal fluid, despite occasional periods of treatment, have remained unaltered.

This case presents the unusual coincidence of manic depressive insanity which seems to have been uninfluenced by the fact of a neurosyphilitic infection, and it also illustrates the long latency without definite symptomatology of neurosyphilis. Had this man been treated, it is quite possible that the recovery ("cure") "of his mental condition" would have been ascribed to the treatment.

CASE 4 AND CASE 5. *Case History, in Brief, of Brother.* J. P., 33 years of age, married, two children, no miscarriages or deaths. Was

first seen in December, 1917. For some three months he had shown decided mental failure, with irritability, forgetfulness, lowered capacity for his work, that of a sugar salesman, reckless and immoral conduct and increasing untidiness.

Physical Examination Unequal pupils, irregular with slow reaction to light. Tongue was tremulous, speech slurring with failure on the test phrases. The knee jerks and ankle jerks were very active, skin reflexes absent. Wassermann of the blood positive and Wassermann of the spinal fluid positive. Albumin + + +, globulin + + +, gold sol reaction 55555-43200, a typical parietic reaction. Cells 24, most of which were lymphocytes. A few plasma cells, occasional few endothelial cells. Diagnosis of paresis was unquestioned and he was put on diarsenol treatment. At the end of five or six injections, he commenced to show improvement, and at the end of the first ten was decidedly improved mentally, not nearly so forgetful or irritable, memory much better, and the untidiness had disappeared. He was given a vacation of two months, during which time he received mercury inunctions and K. I. At the end of that time, he was put on ten more treatments. This time he showed no speech defect though his enunciation was somewhat slow, memory was good, he was tidy, not irritable, was interested in the doings of the day, and given a responsible position in the State service in the Department of Forestry. The spinal fluid at the end of treatment showed practically no changes from the first recorded, that is to say, while there had been decided clinical improvement, there had been no change at all in the biological reactions.

When last heard from, which was nearly a year after his last treatment, he had been examined for the Army and passed as fit for service.

Sister's Case. A. P., 36 years of age, a nurse, who had been very solicitous concerning her brother, had consulted leading orthopedic physicians of Boston for some years concerning pain in her feet. These pains were ascribed to fallen arches and foot strain and she showed moderate degree of flat foot. There was also pain in the knee of a rather intense kind and often of a shooting, stabbing nature. She complained for some time of pains and aches throughout her body, of fatigue with moderate degree of sleeplessness. No mental

changes noted. She consulted Dr. Pratt, who, after taking the Wassermann and finding it positive, referred her to me with a question of neurosyphilis.

Physical Examination. Almost entirely negative, there being perhaps a slight change in the size of the pupils, which were very slightly irregular. The reflexes were active, but not more so than is found in many neurasthenics. Spinal puncture, Wassermann positive, albumin +++, globulin +++, cells 30, 18 lymphocytes, 4 plasma cells, and the rest endothelial and leukocytes. Gold sol reaction 5555443320, a typical paretic reaction. She received ten treatments, during which time most of her pain vanished. She has not reported for treatment since.

In the brother's case the following points are noteworthy: One, the long remission following treatment and probably related to it; second, the non-correspondence between the clinical signs and the biological signs, that is to say, the absence of change in the biological signs, despite the fact that there had been great improvement clinically. As is well known, the reverse relationship retains, that is to say, "improvement in the biological signs with no improvement or even increase in symptoms clinically."

In the sister's case, the outstanding features are the latency of neurosyphilitic manifestations, no definite mental changes, no definite neurological changes noted, and yet the spinal fluid was strongly indicative of general paresis. This is the point that has been emphasized by many workers and captioned and especially described by Solomon.

Book Reviews.

Memoranda on Army General Hospital Administration. By VARIOUS AUTHORS. Edited by P. MITCHELL, M.D. New York: Paul B. Hoeber. 1918.

This book gives a clear and concise account of the administration of army general hospitals. The duties of the officers, clinical and administrative, are explained, and the importance of having a certain number of officers with special technical experience is emphasized. The problem of coördinating the civil and military medical demands, of utilizing technical experience, finding suitable officers for hospital formations, and of conserving the health and technical fitness of valuable medical men and women is considered. Various aspects of the

nursing service and hospital equipment, the administration of the surgical and sanitary divisions, and the clerical duties connected with hospital administration are described.

Surgical Applied Anatomy. By SIR FREDERICK TREVES, F.R.C.S. Seventh edition, revised by ARTHUR KEITH F.R.S., and W. COLLIN MACKENZIE, R.R.S.E. Philadelphia and New York: Lea and Febiger. 1917.

The appearance of the seventh edition of Sir Frederick Treves' book, "Surgical Applied Anatomy," gives evidence of its practical value. Although many additions and alterations have been made in this revision, the book still remains essentially the same as previous editions in spirit, form, and size. Recent surgical progress gained by experience in military service has made possible some modifications, especially in the field of "orthopedic anatomy," which deals with treatment of stiffened joints and disabled limbs. This volume includes twenty-seven new illustrations. As far as possible, the new anatomical nomenclature has been inserted in addition to the older system. Both students and practitioners will find this edition even more useful than the excellent volumes which have preceded it.

Medical Contributions to the Study of Evolution. By J. G. ADAMI, M.D., F.R.S., F.R.C.P. New York: The Macmillan Company. 1918.

"Medical Contributions to the Study of Evolution" is made up of a series of Croonian Lectures delivered before the Royal College of Physicians of London. It deals with the basic principles of the problem of evolution and is significant from both the biological and the medical point of view. The book is divided into four parts. The first deals with adaptation and disease, and considers the question whether variation is primarily inherent or acquired. It is pointed out that although many diseases which are now prevalent existed even in prehistoric times, there are some, such as syphilis, and, more modern, trench fever, which have originated through the process of adaptation. The fluctuations, mutations, and modifications exhibited by bacteria are considered. The author upholds the theory of the inheritance of acquired conditions.

Part II. deals with the problem of variability and adaptation, and strongly refutes Weismann's theory that the germ plasma is potentially eternal. The question of immunity is discussed. The latter part of the book considers the subject of the growth of tissues. The parasitic theory, the "cell rest" theory, and the theory of continuous tumor growth are discussed. This is a book of unusual interest both to those interested in a general way in the problem of evolution and to those concerned with its more scientific aspects.

THE BOSTON Medical and Surgical Journal

Established in 1812

An independently owned Journal of Medicine and Surgery published weekly under the direction of the Editors and an Advisory Committee, by the BOSTON MEDICAL AND SURGICAL JOURNAL SOCIETY, INC.

THURSDAY, MAY 1, 1919

EDITORS

ROBERT M. GREEN, M.D., *Editor-in-Chief*

GEORGE G. SMITH, M.D., *Assistant Editor*

WALTER L. BEECHER, M.D., *For the Massachusetts Medical Society*

COMMITTEE OF CONSULTING EDITORS

WALTER B. CANNON, M.D.

HARVEY CUSHING, M.D.

DAVID L. EDGELL, M.D.

REID HUNT, M.D.

ROGER I. LEE, M.D.

ROBERT B. ONGOOD, M.D.

MILTON J. ROSENBAUM, M.D.

EDWARD C. STREETER, M.D.

ADVISORY COMMITTEE

EDWARD C. STREETER, M.D., *Boston, Chairman*

WALTER P. BOWEN, M.D., *Clinton*

HOMER GAGE, M.D., *Worcester*

JOEL E. GOLDSCHWARTZ, M.D., *Boston*

LYMAN A. JORDAN, M.D., *Swampscott*

ROBERT B. ONGOOD, M.D., *Boston*

HUGH WILLIAMS, M.D., *Boston*

ALFRED WORCESTER, M.D., *Waltham*

SUBSCRIPTION TERMS: \$5.00 per year, in advance, postage paid for the United States. \$6.50 per year for all foreign countries belonging to the Postal Union.

An editor will be in the editorial office daily, except Sunday, from twelve to one p.m.

Papers for publication, and all other communications for the Editorial Department, should be addressed to the Editor, 126 Massachusetts Ave., Boston. Notices and other material for the editorial pages must be received not later than noon on the Saturday preceding the date of publication. Orders for reprints must be returned in writing to the printer with the galley proof of papers. The Journal will furnish free to the author, upon his written request, one hundred eight-page reprints without covers, or the equivalent in pages in the case of articles of greater length.

The Journal does not hold itself responsible for any opinions or sentiments advanced by any contributor in any article published in its columns.

All letters containing business communications, or referring to the publication, subscription, or advertising department of the Journal, should be addressed to

ERNEST GREGORY, *Manager*

126 Massachusetts Ave., Corner Boylston St., Boston, Massachusetts.

AMERICAN SURGEONS AT BRITISH MILITARY ORTHOPEDIC CENTERS.

A FITTING tribute has been paid to the work of the American orthopedists in a reprint by Lennox G. Teece, M.D., Ch.M., of Sydney, Australia, entitled, "The Organization and Surgery of Military Orthopedic Hospitals, with special reference to Nerve Surgery." This article, reprinted from the *Medical Journal of Australia*, September 7th and 14th, 1918, is a brief résumé of the observations made by Dr. Teece during 18 months of service on the surgical staff of the military orthopedic hospital at Shepherd's Bush in London. In speaking of the work of the Americans, he says in part:

"It is interesting to note that the Americans, with praiseworthy enthusiasm and astuteness, recognized the importance that orthopedics would play in military surgery immediately on their entry into the war, and before a single American soldier landed in France, one hundred American orthopedic surgeons were enlisted in the United States Medical Corps, sent

to England, and there distributed amongst the British orthopedic centres with a view to their gaining experience in the military side of orthopedic surgery. . . . In France the Americans have already evolved the excellent scheme of a rest camp for men partially and temporarily disabled by affections such as flat feet, hammer toes, sprains of joints, etc., and the medical control of this camp is vested in an orthopedic surgeon, whose duty it is to render these men again fit for active service as early as possible. . . . This provision on the part of America for the future welfare of her disabled men, taken when she had scarcely yet fired a shot, stands out in striking contrast to the policy of procrastination of the Commonwealth Government, which has allowed nearly four precious years to pass by, and is only now about to make an attempt to organize the treatment of these cases."

The problem of the returned soldier in every country is now of immediate importance, and according to Dr. Teece's article, the problem is presenting itself to Australia in an accentuated form. In Australia, a country of scattered population, orthopedic centers have not yet been established in numbers large enough to permit of extensive treatment to the individual. Since many cases require simply observation on their return to civil life, it falls upon the general practitioner to assume this duty. Orthopedics has become a subject of such vast possibilities during the recent war that it is almost impossible to tell all the benefits which are derived by the disabled soldier, sailor, or marine from this branch of surgery; but Dr. Teece has outlined as briefly as possible the growth of the work in Great Britain and Ireland.

With a word concerning the work of the late Owen Thomas, inventor of the famous Thomas splint, he goes on further to describe the building up of that work by Thomas' nephew, Sir Robert Jones. On his appointment as Inspector of Military Orthopedics, Sir Robert Jones organized military orthopedic centres in Great Britain and Ireland, aided by the Red Cross and private benefactors. There are nine of these centres in England, three in Scotland, and two in Ireland. Shepherd's Bush Hospital is an example of the other centres throughout the British Isles.

An orthopedic hospital differs from an ordinary military hospital in that there is no rapid passing through of cases, and that so many of the patients, as far as military duty is concerned, may never again be called upon for service. Under these conditions special de-

mands must be met with regard to use of a man's time. Shops for the manufacture of all kinds of apparatus are connected with the hospital. Each individual shop is in charge of a competent man and gardening and cleaning as well are done by the patients who are able. Much of the work given to the patients is of a curative type best suited to the individual needs. A gymnasium was built and equipped at the expense of the ex-King Manuel. There are massage and electric departments, an extensive hydro-therapeutic department and a plaster department. The whole impression of this orthopedic hospital, as well as of all the other centres, is one of an active, bustling, wide-awake, productive, and useful community. Among 1200 men, nearly all of them seriously maimed, there is cheer and courage, and of a surprising degree.

The types of cases divide themselves into three groups: (1) the recently wounded, (2) those whose wounds are healed and who require treatment for the disability resulting from that wound, (3) those with deformities and disabilities not the result of wounds.

In the field of nerve surgery the number of cases which occur is large and the conclusions drawn are notably unanimous. Every man suspected of nerve lesion receives a thorough neurological test and the report of his case is filed for reference. The results of nerve surgery as obtained in Shepherd's Bush Hospital are covered very fully by Dr. Teece and treatment is carefully described. Generally speaking, it was found that the results are promising, though on account of greater trauma and almost universal sepsis, recovery among military patients is slower than that of civil life. It is estimated that only 12.9% of nerve sutures and nerve grafts are failures.

Thus the work of these English orthopedic centres is one more proof of the far-reaching importance of a branch of surgery which not a few years ago was chiefly associated with the care of little children and cripples.

RED CROSS HEALTH MISSION TO ITALY.

UNDER the supervision of Col. Robert Perkins, Red Cross Commissioner for Italy, the War Council of the American Red Cross last fall sent a unit of 60 persons to the Italian

Government to conduct a health campaign, the principal object of which shall be the stamping out of tuberculosis. Numbered among the members of this mission are many of the best known tuberculosis specialists in this country. Dr. William Charles White of Pittsburg is director of the unit, and others are: Dr. John H. Lowman of Western Reserve University, Cleveland; Dr. Louis I. Dublin of the Metropolitan Life Insurance Company, New York; Dr. Richard A. Bolt of the Health Department of the City of Cleveland; Dr. E. A. Paterson of Cleveland; Dr. R. G. Paterson of Columbus, Ohio; Miss Mary S. Gardner, head of the Bureau of Public Health Nursing of the American Red Cross, and Lewis D. Bement of Framingham, Massachusetts, who is the executive manager of the organization. The work will be divided as follows: Medical Division; Division of Medical Statistics; Child Welfare Division; Division of Medical Inspection of Public Schools; Division of Education and Organization; Division of Public Health Nursing, each division to be directed by one of the above named personnel.

In sending this health mission to Italy it is not to be inferred that it is done because Italy is backward regarding these matters. Dr. White, who was Director of the Red Cross tuberculosis unit in France for 10 months, gives us the following statement in a recent number of *Science* concerning the situation in Italy:

"The city of Genoa, for many years, probably over 20, has had a museum showing the various phases of tuberculosis, as well as modern methods of combating them. . . . Attached to the museum are a dispensary and visiting nurses' school, not surpassed by any of the American cities.

"In Genoa also is an attractive open-air school . . . where provision is made for 200 or 300 Genoese children of the more unfortunate classes. They arrive in the morning, get their midday meal and morning luncheon, and are sent to their homes in the evening. Play is supervised by special teachers, bathing facilities arranged for; the children take singing lessons, and a healthier, happier looking lot of children one could scarcely find There is also a children's hospital in the mountains. In Rome the *Giornale d'Italia* raised money by popular subscription and built a beautiful hospital on one of the hills for children with bone tuberculosis.

"The American Red Cross had the privilege of giving \$25,000 to this hospital.

"But Italy's great spirit for progression was arrested with the declaration of war, which compelled the mobilization of all her resources for the one big task in hand. It naturally followed that her civilian population had to wait until the military needs were cared for

"When Italy saw the help we were extending to France, she invited the United States to come to her shores with such assistance as we could offer."

Much interest is evidenced in the success of this health mission; and its effect, it is anticipated, will be far-reaching.

REEDUCATION OF DISABLED SOLDIERS AND SAILORS.

THE Government is endeavoring to do everything possible to restore the disabled soldier and sailor to health, strength, and self-supporting activity. Upon his discharge, if an artificial limb or other orthopedic or mechanical appliance is needed, the Bureau of War-Risk Insurance supplies it without cost and renews it when necessary. Any man whose disability entitles him to compensation under the War-Risk Insurance Act, may be provided by the Federal Board with a course of vocational training for a new occupation. Although this course is optional, the Government strongly recommends each man who needs it, to undertake this training. If his disability prevents him from returning to employment without training, the course will be furnished free of cost and he will be paid, as long as the training lasts, a monthly compensation of not less than sixty-five dollars a month, exclusive of the sum paid dependents, or less than one hundred and seventy-five dollars a month inclusive of the sum paid dependents if they are living with him. If his disability does not prevent him from returning to employment without training, the course will be free and compensation will be allowed him, but not his dependents. In either case, the family of each disabled man will continue to receive from the Government during his period of training the same monthly allotment as that paid prior to his discharge from the Army or the Navy. If the disability continues after his course has been completed, he will continue to receive compensation. Upon the completion of his training, the Federal Board, through its

Employment Service, will assist him to secure a position.

All disabled soldiers should address their communications either to the Federal Board for Vocational Education, Washington, D. C., or to the district office of the Federal Board of the district in which he is located. The office of District No. 1, which includes Maine, New Hampshire, Vermont, Massachusetts, and Rhode Island, is located at Room 433 Tremont Building, Boston, Mass. The office of District 2, including Connecticut, is at Room 711, 280 Broadway, New York.

OSWALDO CRUZ' CAMPAIGN AGAINST YELLOW FEVER.

"GIVE me the proper authority and a sufficient force and means to work with, and I will rid Rio of yellow fever in three years." This was the confidential assertion of a young Brazilian, Oswaldo Cruz, who was, in 1900, engaged in bacteriological and toxicological research at the Pasteur Institute. Rio was the native city of this young man and thus his enthusiasm toward stamping out the plague had an added force. For sixty years, since 1849, yellow fever had held a heavy hand over the port and it was often told among men who followed the sea that "to go to Rio is to commit suicide." A total of 59,000 deaths had been exacted during these years, in the city proper. In 1910, when a serious outbreak of yellow fever occurred in Rio, Prof. Roux selected Oswaldo Cruz to direct a campaign against the dread disease. Inspired by the success of the American Yellow Fever Commission in Cuba, Cruz, in 1903, with 75 medical men, started on his mission to exterminate the mosquito, *Stegomyia fasciata*, which carries the disease to man. Drastic measures for extermination were immediately outlined and put into execution by Cruz and his colleagues. Compulsory notification of the disease was required. In 1903 there were 584 fatal cases in Rio and in 1908 it was completely eradicated. In 1908 Cruz resigned the post of Director-General of Public Health to accept a position as head of the Institute of Tropical Diseases. But on Feb. 11, 1917, a comparatively few years after the completion of a campaign which embraced nearly the whole of Brazil in its far-reaching

success, Oswaldo Cruz passed away in his forty-fifth year, a most successful worker in the field of preventive medicine. The institution in which he served from 1908 on, is now known as the Oswaldo Cruz Institute for Experimental Pathology and Serum Therapeutics.

SUFFOLK DISTRICT CENSORS' MEETING.

ATTENTION of physicians resident in Suffolk County but not yet members of the Massachusetts Medical Society, is called to the Censors' meeting announced on the last page of this issue of the JOURNAL. This notice was previously published for the date of May 8. Attention is particularly directed to the change of date from May 8 to May 1, as announced in last week's issue. All candidates should make personal application to the Secretary, and present their medical diploma at least a fortnight before the examination.

MEDICAL NOTES.

"PTOMAIN" POISONING.—The following extract from a recent issue of the *Bulletin* of the Chicago School of Sanitary Instruction presents the views of this institution on the subject of "ptomain" poisoning.

"The term 'ptomain' poisoning has become a cloak for ignorance. Any acute gastro-intestinal attack resulting from a great variety of causes is apt to be called 'ptomain' poisoning. From the time of Selmi, when ptomains were regarded as animal alkaloids, our conception of these substances has changed markedly.

"Rosenau and his associates at Harvard have been searching in vain for the past year and a half for ptomains that might cause gastro-intestinal or other symptoms. Split products of protein putrefaction are readily isolated. Some of these products have physiologic activity, but none of them thus far has been demonstrated to be poisonous when taken by the mouth.

"Chemists are now seldom confident of the purity of protein fractions, even when obtained in crystalline form. The chemical search for split protein products as the cause of 'ptomain' poisoning has practically been abandoned. Most of these split products are amines, which are either not poisonous at all, or no more so than their corresponding salts.

"The chemical resemblance between muscarin

and cholin has directed the work toward the phosphatids, but thus far this line of research has not helped solve the puzzle of 'ptomain' poisoning. Chemists avoid the use of the word ptomains, for the reason that it lacks precision.

"Ptomain is a term for chemical substances of uncertain origin, unknown nature, and doubtful existence."

EPIDEMIC INFLUENZA IN GREECE.—A report from the American consul general at Athens, Greece, published in a recent Public Health Report, describes the epidemic of influenza in that city last fall.

"The first appearance of influenza in Greece occurred last summer, toward the end of May; the symptoms were but slight and the people who were attacked suffered for three or four days with fever, accompanied by nervous symptoms. It was called at the time 'Spanish fever,' from the country where it first made its appearance.

"Since the month of September the epidemic became worse and caused a considerable rise in the mortality. Many cases complicated with broncho-pneumonia appeared then all over the country, and of these cases perhaps 50 per cent. were fatal. The most ordinary cases appeared with a general cyanosis, which spread the rumor of the existence of plague and cholera. The people were alarmed and the sanitary authorities were constrained to go carefully into the matter and issue instructions as to the nature of the disease and the necessary steps to be taken to avoid contamination and complications. Among these measures were the closing of schools, both private and public, and of nocturnal theatres and cinemas. People were then instructed to avoid the overcrowded places and trams and to retire to bed with first symptoms of malaise; they were further informed that coughing and sneezing were the means of spreading the disease from person to person. Owing to these prophylactic measures, or rather to the lapse of time, the disease began to decrease toward the middle of December, or rather began to lose its severe and fatal form.

"The ages that suffered most and had most of the fatal cases were between 20 and 45. The symptomatic treatment has generally been followed here. In the beginning of the disease most of the doctors tried the injection of corrosive sublimate in solution, but very soon it was abandoned, owing to rather bad effects. The colloidal metals either prepared locally as colloidal silver or as electrargol by subcutaneous or intravenous injections, if there are no complications, have also been tried, and it would appear that this treatment gives very good results. Vaccine treatment was not tried here at all."

The total number of deaths from influenza and pneumonia in Athens and Piraeus during

the months of September, October, November, and December, amounted to one thousand and nineteen.

INFLUENZA IN THE PAST.—It is of interest to observe in the records of the past the former appearance of a disease which is prevalent in epidemic form at the present time. An article in the *British Medical Journal* gives us a glimpse into the past history of influenza.

"The disease now so well known as influenza was familiar to physicians from remote antiquity as a catarrhal pestilential fever. Among the people in different epidemics it went by various names, most of them indicative of novelty. Thus, in this country it was known in 1556 as the 'new burning ague,' in 1562 as the 'new disease,' the 'new ague,' and—with a touch of irony—the 'new delight' and the 'gentle conviction.' In France it was called *grippe* from the suddenness of its onset (*a gripper*, to seize), *coquette* and *coqueluche* from the capriciousness of its manifestations, while the universality of its diffusion was designated as *la générale*. For the same reason the Germans called it *Modelfieber*, and from the suddenness of attack *Blitzkatarrh* (lightning cold). Interesting descriptions are given by keen-sighted non-professional witnesses. In 1562 Mary Queen of Scots fell a victim to the prevailing epidemic. Randolph, Elizabeth's ambassador, writes to Cecil from Edinburgh in November: 'Maye it please your Honer immediately upon the Queen's arrival here, she fell acquaynted with a new disease that is common in this towne, called here the newe acquayntance, which passes also through her whole Courte, neither sparing lords, ladies, nor damoyseles, not so much as either Frenche or English. It ys a plague in their heades that have it and a soreness in their stomackes, with a great cough, that remayneth with some longer, with others shorter tyme, as yt findeth after bodies for the nature of the disease. The quene kept her bed six days. There was no appearance of danger, nor manie that die of the disease, excepte some olde folkes. My lord of Murray is now presently in it, the lord of Lidingetone hathe it, and I am ashamed to say that I have byne free of it, seeing that it seketh acquayntance at all man's handes.' Nearly three centuries later we have an account by Thomas Carlyle in a letter written in January, 1837, to his young sister, Mrs. Hanning, then living at Manchester: 'All people have got a thing they call Influenza, a dirty, feverish kind of cold; very miserable and so general as was hardly ever seen. Printing offices, Manufactories, Tailor shops and such like are struck silent, every second man lying sniffling in his respective place of abode. The same seems to be the rule in the North too. I suppose the miserable temperate climate may

be the cause. Worse weather never fell from the lift, to my judgment, than we have here. Reek, mist, cold, wet; the day before yesterday there was one of our completest London fogs—a thing of which I suppose you even at Manchester can form no kind of notion.' Among the innumerable theories as to the cause of the disease, that of the Scottish writer, Patrick Walker, deserves mention. In his life of Alexander Peden, the famous Covenanting leader, speaking of the epidemic of 1712, he attributes the 'new burning ague' to 'the effects and evidences of God's displeasure appearing more and more against us since the incorporating unions, mingling ourselves with the people of these abominations, making ourselves liable to the judgments, of which we are deeply shaming.' The 'people of the abominations' were the English, the incorporating union was the Union of the Crowns in 1707."

THE GRANDE CHARTREUSE AS A BASE HOSPITAL.—At the beginning of the present year, the buildings of the Grande Chartreuse, which have been empty since the sequestration of the monastery in 1903, were handed over to the United States for use as a base hospital. A recent issue of the *British Medical Journal* describes the buildings.

The monastery was originally founded by St. Bruno in 1085, and in the succeeding six centuries was eight times destroyed by fire. The present buildings have no architectural pretensions, and date from 1676; they stand in a picturesque situation at an elevation of over 3,000 feet, on the northern slopes of the Dauphiné Alps, about twenty miles from Grenoble. Since the buildings were taken over by No. 3 Mount Sinai Unit, which left America in February, they have undergone various transformations and a number of new structures have been erected. A dispensary has been established in the pharmacy of the monks, and laboratory and x-ray outfits have been provided. There are two operating theatres, and separate rooms for eye, nose, and throat work, jaw surgery, and dentistry. The ward buildings, which vary in size, the largest providing 115 beds, are lighted by electricity and warmed with steam heating. Covered walks for convalescents have been provided, and will no doubt be needed, as the winter climate is rigorous. The Mount Sinai unit consists of twenty-six officers, among them being some of the leading physicians and surgeons of New York, sixty-five nurses, five female civilians, and 153 enlisted men. The first patients were admitted in May.

HONOR FOR DR. F. W. MOTT.—Dr. F. W. Mott has been awarded the Moxon medal of the Royal College of Physicians of London.

PARIS MEDICAL FACULTY.—The Paris Medical Faculty has proposed reforms and extensions in the scope and methods of its teaching work. A recent issue of *Science* has reported that for the teaching of pathology, cinematographic apparatus will be installed in the lecture theatres and collections of films are to be made. One of the two chairs of internal pathology is to be transformed into a clinic of infectious diseases. The practical curriculum is to be completed and supplemented by a large scheme of free clinical teaching in which all the members of hospital staffs who wish to do so will take part. With the object of ensuring almost full autonomy to the services of the faculty by securing the most favorable organization for the treatment of patients and the instruction of students, a commission of studies has been set up which includes representatives of the Ministries of Public Instruction and of the Interior, the Prefecture of the Seine, the Municipal Council, the University, the Faculty, and the medical staffs of the hospitals. Arrangements will be made for the purpose of attracting to Paris men of science, doctors, and students from foreign countries. The government has favorably received a request that it should provide funds for the improvement of existing services and for the creation of others, particularly an institute of medical biology. Internal improvements have been made in the library and museums of the faculty. A special committee has been engaged in elaborating the statutes of a society of friends of the Paris Medical faculty.

SANITARY CONGRESS OF AVIATION.—On February 15, in the Great Hall of the University of Rome, there was opened an inter-allied sanitary congress of aviation, for the purpose of establishing international standards for testing the aptitude of candidates for air service; the criteria of fitness of the flying personnel in the air; the best means for the protection of air-men against great barometric depressions and cold at high altitudes; and hygienic rules for future civilian aviation, and related subjects.

DEATHS FROM INFLUENZA.—A recent health report indicates that during the month of March deaths from influenza have declined throughout the country. For each of the four weeks ending March 29, the number of deaths were respectively 946, 932, 737, and 655.

RED CROSS CONFERENCE AT CANNES.—The first interallied Red Cross Conference opened on April 1 at Cannes, France, with an address by Henry P. Davison, chairman of the American Red Cross Council. The following Americans attended the meeting: Henry Morgenthau, Lieut.-Col. Lindsay R. Williams, U.S.A.; Dr. E. R. Baldwin of New York, Dr. Wycliffe Rose, director-general of the International Health Board of the Rockefeller Foundation; Dr. L. E. Holt, College of Physicians and Surgeons; Dr. Livingston Farrand, formerly president of the University of Colorado; Col. Richard P. Strong of Harvard University, and Col. F. R. Russell, representing the War Department.

The Conference will continue for two weeks, and means of combating tuberculosis and other diseases, and measures for promoting public health will be discussed.

RETURN OF DR. DUBOIS.—Dr. Eoline C. Dubois of Springfield has recently returned from a year's service in France.

AMERICAN PEDIATRIC SOCIETY.—The American Pediatric Society will hold its thirty-first annual meeting at the Chalfonte Hotel, Atlantic City, New Jersey, on June 16, 17, and 18, 1919. The following addresses will be delivered:

1. President's Address.
Edwin E. Graham, M.D., Philadelphia.
2. The Chemistry of Human Milk.
Fritz B. Talbot, M.D., Boston, and W. Dennis, M.D.
3. Certain Nutritional Disorders in Infants Associated with a Proteolytic Intestinal Flora.
Langley Porter, M.D., San Francisco.
4. The Pathogenesis of Certain Nutritional Disorders.
W. McKim Marriott, M.D., St. Louis, and J. F. Perkins, M.D.
5. Precipitin Reactions in Infant Stools.
Clifford G. Grulee, M.D., Chicago.
6. Relation of Convulsions in Infancy and Early Childhood to Epilepsy in Later Life.
J. Lovett Morse, M.D., Boston.
7. Certain Aspects of Cutaneous Hypersensitiveness.
E. C. Fleischner, M.D., San Francisco.
8. Quarantine and Disinfection in Scarlet Fever.
J. Claxton Gittings, M.D., Philadelphia.
9. A Study of the Cholesterol Metabolism in Infants.
K. D. Blackfan, M.D., Baltimore, and J. L. Gamble, M.D.
10. The Energy Metabolism of Children from Birth to Puberty.
Fritz B. Talbot, M.D., Boston.
11. Some Details in the Management of a Premature Baby.
Isaac A. Abt, M.D., Chicago.
12. Polioencephalitis following Influenza during the Recent Epidemic.
Henry Helman, M.D., New York.

13. The Cause of a "Sporadic" Case of Cerebrospinal Meningitis.
Henry L. K. Shaw, M.D., Albany.
14. The Tertiary Cerebral Manifestations of Hereditary Syphilis.
Alfred Hand, Jr., M.D., Philadelphia.
15. Cerebrospinal Involvement in Hereditary Syphilis.
P. C. Johns, M.D., St. Louis.
16. A Health Study of School Children.
Richard M. Smith, M.D., Boston.
17. The Predominance of Seborrheic Eczema in Early Life.
Thomas S. Southworth, M.D., New York.
18. A Case of Aneurysm of the Ascending Arch of the Aorta in a Boy of Thirteen Years.
Henry Heiman, M.D., New York.
19. Two Cases of Pyelitis and a Case of Suppression of Urine for Four Days.
Rowl and G. Freeman, M.D., New York.
20. An Interesting Lung Case with Exhibition of X-Ray Plate.
John Ruräh, M.D., Baltimore.
21. A Case of Hodgkin's Disease in a Girl of Two Years.
Langley Porter, M.D., San Francisco.
22. A Case of Calculus and a Case of Scorbatic Hematuria.
Percival J. Eaton, M.D., Pittsburgh.
23. A Case Report.
D. Murray Cowie, M.D., Ann Arbor.
24. Elephantiasis of the Middle Finger.
Henry F. Helmholz, M.D., Evanston.
25. A Few Roentgenograms Demonstrating Gastro-Intestinal Abnormalities.
Charles Giltmore Kerley, M.D., New York.
26. Stenosis of the Pylorus in an Eleven Year Old Boy.
Howard Childs Carpenter, M.D., Philadelphia.
27. Business Meeting (For members only). Report of Council.
28. Child Welfare Work in the War Zone.
Maynard Ladd, M.D., Boston.
29. The Incidence and Significance of the Rheumatic Nodules in Children.
Joseph Brennemann, M.D., Chicago.
30. The Prevention of the Spread of Measles.
Charles Herrman, M.D., New York.
31. Congenital Atelectasis of the Lungs.
Charles Hunter Dunn, M.D., Boston.
32. Osteogenesis Imperfecta.
H. M. McClanahan, M.D., Omaha.
33. Care and Treatment of Whooping-Cough Patients.
J. E. Winters, M.D., New York.
34. Otitis Media in Children.
Walter Lester Carr, M.D., New York.

BOSTON AND MASSACHUSETTS.

WEEK'S DEATH RATE IN BOSTON.—During the week ending April 12, 1919, the number of deaths reported was 292 against 268 last year, with a rate of 19.12 against 17.82 last year. There were 50 deaths under one year of age against 41 last year.

The number of cases of principal reportable diseases were: Diphtheria, 33; whooping cough, 9; scarlet fever, 71; typhoid fever, 5; measles, 8; tuberculosis, 53. Included in the above were the following cases of non-residents: Diphtheria, 3; scarlet fever, 11; typhoid fever, 1; tuberculosis, 3.

Total deaths from these diseases were: Diphtheria, 1; scarlet fever, 2; tuberculosis, 27. Included in the above were the following non-residents: Tuberculosis, 2.

Influenza cases, 54; influenza deaths, 9.

SPRINGFIELD ACADEMY OF MEDICINE.—The Annual Meeting of the Springfield Academy of Medicine was held in Springfield on Tuesday, April 8, 1919. The annual reports were read and officers were elected for the year 1919-1920. An address, "Influenza in France," was delivered by Major Roger Kinnicutt, Base Hospital No. 6.

MASSACHUSETTS STATE DEPARTMENT OF HEALTH.—The Massachusetts State Department of Health wishes to announce the following changes and appointments:

A Sub-division of Public Health Nursing has been created within the Division of Hygiene. This will include the Health Instructor Nurses of the Division of Hygiene. Miss Blanche Wildes, one of the present Health Instructors, has been appointed Chief of this Sub-division.

Dr. Edwin N. Kent of Boston has been appointed Supervisor of Mouth Hygiene in the Division of Hygiene. Dr. Kent is now President of the Dental Hygiene Council of Massachusetts. His work for the present will have to do with the preparation of educational material on mouth hygiene, and gathering and correlating information regarding dental dispensaries in the State.

Miss Bernice W. Billings, for the past year Chief of the Sub-division of Tuberculosis in the Division of Communicable Diseases, has resigned to accept a position as Executive Secretary of the Oneida County Tuberculosis Committee, New York.

Dr. William W. Walcott of Natick, Captain and Assistant Surgeon, U. S. Medical Corps, serving with the 101st U. S. Engineers, died in France on March 16, 1919.

Dr. Walcott had been with the Massachusetts State Department of Health since 1907, first as State Inspector of Health, and later as District Health Officer. He obtained leave of absence from the Department in September, 1916, to enter the Army service.

TUBERCULOSIS FINDINGS IN FRAMINGHAM.—The tuberculosis findings resulting from the work done by the Framingham Community Health and Tuberculosis Demonstration are re-

ported in *Framingham Monograph No. 5*. In the course of this campaign, there has been no unusual invasion into or exodus from the community as a result of the Demonstration. The total number of cases under care since the beginning of the work to the present time is 242, which, with suspicious cases, 69, gives a total of 311. While only 27 cases were under care on January 1, 1917, this number was increased on November 15, 1918, to 181 cases. During 1916, there were 40 cases under observation or treatment, a number representative of past conditions in Framingham; during 1917, this number increased to 185. The significance of this work may be indicated by the fact that during the decade 1907 to 1916, the number of cases reported annually averaged 14. In 1917, this number jumped to 59. Of the deaths occurring to date, 45 per cent. were in out-of-town institutions.

Of the total number of cases now under care, 12 per cent. are receiving treatment out of town. Of the number of cases now under care, 37 per cent. are active. The Framingham experience would indicate a need for two institutional beds for every death. The total number of active cases under observation or treatment since the beginning of the Demonstration is 136, or 56 per cent. of all the cases observed. It is believed that nearly all of the active cases in the community have come under observation or treatment. During the past, known cases to deaths in Framingham have averaged 3 to 1; in 1917, the number was 11 to 1, including arrested cases. On a basis of the medical examination drives, it is indicated that the total number of cases (including arrested cases) to deaths is 21 to 1, whereas the total number of active cases to deaths is 9 to 1. If it is assumed that Framingham should have a death rate similar to the Registration Area, the ratio of total cases to deaths would be 15 to 1 and of active cases 7 to 1. Of those examined, 2.15 per cent. were tuberculous.

During the preceding decade, the tuberculous death rate was 99.6 per 100,000. For 1917 it was 99 per 100,000. For 1918 the indications are that the rate will be approximately 74 per 100,000. Only three of the total number of deaths occurring in Framingham during the Demonstration period were non-residents. Fifty-five per cent. of the deaths were between 16 and 45 years of age. The outstanding fact in regard to occupations is that 33

per cent. were recorded as "housewives" or engaged in housework.

The consultation service has demonstrated itself to be a very superior instrument for the discovery of tuberculosis cases, particularly of the active type, and is a logical adjunct to the ordinary dispensary activity. It also serves materially to interest and instruct the physicians, stimulates the discovery of early cases, and increases reporting. The known cases are widely distributed among the local physicians as to medical care, most of the physicians being in touch with the Health Station regarding the handling of one or more cases. Further, practically all of the physicians employ the consultation service of the Health Station. Framingham is a typical industrial American community, and, on a basis of past mortality and morbidity records, is affected with, if anything, less tuberculosis than would be representative of the Registration Area as a whole. On the other hand, the disease exists to a much greater degree than has hitherto been supposed, and can be discovered and brought under control if an intensive search is made for it.

The application of the Framingham findings to the United States as a whole would indicate that there are about one million active cases in the country at large and something over two million active and arrested cases. These figures are certainly minimum estimates, in view of the excessive amount of tuberculosis prevalent in the colored population of the Southern States.

The Massachusetts Medical Society.

The next annual meeting will be held at the Copley-Plaza Hotel, Boston, June 3 and 4, 1919.

The following letter has been sent to the members of the State Committee of the Medical Section, Council of National Defense:

TERMINATION OF WAR ACTIVITIES. MEDICAL SECTION, COUNCIL OF NATIONAL DEFENSE.

UPON the signing of the armistice on November 11, 1918, the strenuous war time activities of the committees of the Medical Section of the Council of National Defense automatically ceased. As the unfinished business in the hands

of the committees at that time is now approaching completion, you are hereby notified of the termination of your war duties as a State Committeeman on April 1, 1919.

Not until the history of our part in the great war is written will the people realize the important rôle the medical profession of the United States played in making our country a deciding factor in winning the war. Do you realize that in the year before our entry into the conflict the commissioned officers in the Medical Departments of the Army and the Navy numbered less than five hundred in each service and that practically 40,000 civilian doctors had been added to these two Corps by the time hostilities had ceased? When the story is told of the enrollment of these thousands of doctors, it must give the largest credit to our many State and county committees who labored so patriotically and continuously to carry out the recommendations of the organization under which they worked, the Council of National Defense, and thus aided the administrative departments of the Surgeons General of the Army, the Navy, and the Public Health Service and the Provost Marshal General.

The work of these committees under the direction of the General Medical Board had to do with activities of which the following is a brief summary: Recruiting medical officers; standardization of medical and surgical supplies; coöperation in controlling venereal diseases; mobilizing five thousand dental surgeons; establishing committees on hygiene, sanitation, general surgery, orthopedic surgery, ophthalmology, otology, rhinology, and laryngology, general medicine, nursing, women physicians and medical schools, organizing medical advisory boards; the study of industrial medicine; securing through legislation increased rank for reserve medical officers; and finally, individual classification of the members of the profession through the medium of the Volunteer Medical Service Corps.

I want you to know that those of us who have had the responsibility of organizing and enrolling the medical profession and resources appreciate the value of your work and thank you for it from the bottom of our hearts. This includes the Secretary of War, who presides over the Council of National Defense, the Secretary of the Navy, who is one of its members, and the President of the United States, who appointed the Council and on two

occasions has said, in speaking of our state and county committees: "Will you not be kind enough to convey to them a message of sincere appreciation from me of their services as authorized governmental agencies? . . . The health of the Army and Navy and the health of the country at large is due to the coöperation which the public authorities have had from the medical profession."

Finally, in sending this communication to you after our two years of stressing work together, I want to thank you personally for your ever prompt response to my calls for help and for the evidence you have always shown me of your loyalty, fidelity, and friendship.

Yours very truly,

FRANKLIN MARTIN,
*Chairman General Medical Board,
Council National Defense.*

Obit uarirs.

FRANCIS JOSEPH GIBLIN, M.D.

DR. FRANCIS JOSEPH GIBLIN died at his home in Dorchester, April 13, 1919, aged 52 years. Dr. Giblin entered the Harvard Dental School in 1886, transferred to the Medical School the following year and took his M.D. in 1893. He was a house officer at the Carney Hospital in South Boston and afterwards served for two years in Coomb's Hospital, Dublin, Ire. Later he settled in Dorchester, there serving on the visiting staff of St. Mary's Infant Asylum, becoming in time president of the staff.

He is survived by his widow and one child. He was a Fellow of the Massachusetts Medical Society.

CLARKE S. GOULD, M.D.

DR. CLARKE S. GOULD died on March 28, at the Peter Bent Brigham Hospital, Boston, after an illness of two weeks. Dr. Gould was born on August 2, 1864, in South Boston, the son of Dr. Joseph F. Gould, who was surgeon of the 4th Massachusetts Volunteers in the Civil War. He received his medical degree from Harvard Medical School in 1887, and began practice in Maynard. In 1889, he began practising in Norwood. In 1915 he entered the service of the State Board of Charities. Two years later he

was commissioned lieutenant in the Medical Corps of the United States Army, and went to Fort Benjamin Harrison, Indiana, for training. He was promoted to the rank of captain, and was stationed at Camp Sherman, Chillicothe, Ohio, where he remained until honorably discharged on December 28, 1918. In February, he was appointed assistant medical examiner of the Federal Vocational and Educational Board, and held that position at the time of his death. Dr. Gould was a member of the Massachusetts Medical Society and of the Norfolk County Medical Association.

EVERETT WHITE, M.D.

DR. EVERETT WHITE was born at Whitehall, N. Y., in 1870. He graduated from the College of Physicians and Surgeons, Maryland, in 1897, and began to practise in Lynn twenty-one years ago.

He was a member of the American Medical Association and of the I. O. O. F.

He was the youngest of eight children, seven of whom were boys and survive him. He leaves two brothers who are physicians, Dr. P. P. White of North Granville, N. Y., and Dr. Robert C. White of Willimantic, Conn. He had a nephew, Dr. J. Robert White of Lynn, who is a surgeon on the *U. S. S. Melville*, who has been in France for two years and is now in Cuba.

Four years ago he married Susie Archer Fellows, who survives him.

Three months ago Dr. White was obliged to give up practising and went to the home of his brother, Duane White in Roxbury, where he died February 27, 1919, from tuberculosis.

He was 48 years old. Services were held from his late residence at 268 Chatham Street, East Lynn, on Saturday, March 1. He was buried in Locust Grove Cemetery, Ipswich, Mass.

Correspondence.

A LETTER FROM FRANCE.

Camp Hospital No. 97,

A. P. O., 921, A. E. F., France,
March 19, 1919.

Mr. Editor:—

I thought you might be interested to know that I am still in France on duty with the American Regulating Station B and Camp Hospital No. 97, at St. Dizier, France. I am doing laboratory and internal medicine work. We are kept very busy here at

present since the hospitals around us are closing up and the men from those places are sent to us for hospital care and treatment. We do not know when we shall be ordered back home. The only thing we know is that we are going to stay here until our work for the glorious cause is duly finished and well done. It surely feels very hard to be away from good old Boston for over a year, but one must be satisfied and honored to have an occasion to serve his country with the best in him. I sincerely hope that we shall all be back soon and have the grand pleasure of meeting our friends again and that the period of reconstruction should begin with the greatest speed throughout the entire world, so that normal days and the progress of science shall not perish from this earth.

Greetings from the beautiful and heroic France.

Sincerely, one of your members,

LIEUT. DAVID B. MEDALLA, M.C.

NOTICES.

THE FORSYTH DENTAL INFIRMARY FOR CHILDREN.

Undergraduate Assistants.

During the months of June, July, August, and September, an opportunity is offered by the Trustees of the Forsyth Dental Infirmary for Children to a limited number of undergraduate students to act as assistants in the clinics of the Infirmary. This privilege permits a student to obtain unusual clinical advantages in the various departments of the institution where operative dentistry, orthodontia, nose and throat and oral surgery, radiography, pathological diagnosis and research work are continually carried on.

Operators' gowns, instruments, and filling materials are furnished. Over three hundred children are treated daily.

For further details apply, before May 15, to the Director, Dr. Harold DeW. Cross, 140 The Fenway, Boston, Mass.

Permanent Staff Appointments.

A competitive examination of graduates in dentistry (of less than three years' standing) for appointments to positions on the Permanent Staff for full and one-half time service will be held early in June at the Infirmary.

Appointments will be made for one or two years as follows:

Full time service requiring operating five and one-half days a week, at a salary of \$1000 a year.

One-half time service, requiring operating six half days a week, either forenoon or afternoon, at a salary of \$500 a year.

These appointments will be made subject to satisfying the requirements of the Massachusetts State Board of Registration in Dentistry and to "qualifying" in the practical work of the clinics during one month's trial.

Members of this staff are entitled to the advantages of reports and clinics by experts in the various branches of dentistry, from different parts of the world, in addition to the numerous special clinics and lectures.

Operators, after serving four months, are eligible, by qualifying, for appointments in the special clinics where post graduate work is given.

The operators on this staff have the advantage of the clinics and lectures of the Post Graduate School of Orthodontia.

The Infirmary clinics provide unusual advantages in the various departments of the institution where operative dentistry, orthodontia, nose and throat and oral surgery, extracting, novocaine technic, radiography, pathological diagnosis and research work are continually carried on.

The average number of cases treated daily in the various clinics is over 300.

Supplies and necessary operating instruments are furnished; up-to-date apparatus, including electrical engines, sterile instrument trays, fountain cuspidors, compressed air, and the modern operating-room-type of lavatories are available for use.

A diploma of service will be issued by the Trustees to each member of this staff who has completed this term of service in a satisfactory manner.

Applications for the above positions should be made not later than May 15.

Information and the date of the examination will be furnished to those interested.

Harold DeW. Cross, D.M.D., Director, 140 The Fenway, Boston, Mass.

UNITED STATES CIVIL SERVICE EXAMINATION.

MEDICAL ASSISTANT (MALE), \$2,000.

May 13, 1919.

The United States Civil Service Commission announces an open competitive examination for medical assistant, for men only. A vacancy in the Bureau of Chemistry, Department of Agriculture, Washington, D. C., at \$2,000 a year, and future vacancies requiring similar qualifications at this or higher or lower salaries, will be filled from this examination, unless it is found in the interest of the service to fill any vacancy by reinstatement, transfer, or promotion.

The duties of this position will be to review the statements of therapeutic and curative effects of proprietary medicine; to familiarize oneself with the current therapeutic literature of the various schools of medicine; to assist in the preparation and trial of cases under the Food and Drugs Act, etc. Ability to translate foreign medical literature is desirable.

Competitors will not be required to report for examination at any place, but will be rated on the following subjects, which will have the relative weights indicated:

Subjects	Weights
1. General education and medical training . . .	35
2. Practical or professional experience and fitness	45
3. Publications or thesis (to be filed with the application)	20
Total	100

Under the first two subjects competitors will be rated upon the sworn statements in their applications and upon corroborative evidence adduced by the Commission.

Applicants must show that they have at least an academic degree, that they are graduates from a medical school of recognized standing, and that they have had at least six years' subsequent experience in the practice of medicine or two years' subsequent experience in pharmacological investigations.

If a thesis is submitted under the third subject it must be of at least 500 words and must present the results of original investigational work on the part of the applicant in some phase of medicine or pharmacology, or be a discussion of any one of the following subjects:

1. What evidence is necessary to establish the therapeutic value of a drug preparation?
2. What is the value of the "patent" medicine?
3. What are the principles of the treatment of disease?

Applicants will be admitted to this examination regardless of their age, but at the request of a department making appointments, certification will be made of eligibles who are within reasonable age limits.

Applicants must submit with their applications their unmounted photographs, taken within two years,

with their names written thereon. Proofs or group photographs will not be accepted.

Applicants will be admitted to this examination regardless of their residence and domicile; but only those who have been actually domiciled in the State or Territory in which they reside for at least one year previous to the examination, and who have the county officer's certificate in the application form executed, may become eligible for permanent appointment to the apportioned service in Washington, D. C.

This examination is open to all male citizens of the United States who meet the requirements.

Applicants should at once apply for Form 2118, stating the title of the examination desired, to the Civil Service Commission, Washington, D. C.; the Secretary of the United States Civil Service Board, Customhouse, Boston, Mass., New York, N. Y., New Orleans, La., Honolulu, Hawaii; Post Office, Philadelphia, Pa., Atlanta, Ga., Cincinnati, Ohio, Chicago, Ill., St. Paul, Minn., Seattle, Wash., San Francisco, Cal.; Old Customhouse, St. Louis, Mo.; Administration Building, Balboa Heights, Canal Zone; or to the Chairman of the Porto Rican Civil Service Commission, San Juan, P. R.

Applications should be properly executed, excluding the medical certificate, and must be filed with the Civil Service Commission, Washington, D. C., with the material required, prior to the hour of closing business on May 13, 1919.

The exact title of the examination, as given at the head of this announcement, should be stated in the application form.

SOCIETY NOTICES.

SUFFOLK DISTRICT MEDICAL SOCIETY.—The annual meeting of the Suffolk District Medical Society will be held April 30, 8.15 P.M., at the Boston Medical Library, 8 The Fenway.

Speakers:

Dr. David L. Edsall, "Some Relations of the Practitioner to Industrial Medicine."

Dr. Cecil K. Drinker, "An Unusual Type of Metallic Poisoning."

J. BAPT BLAKE, M.D., *President*.

GEORGE R. MINOT, M.D., *Secretary*.

CENSORS' MEETING.—The Censors of the Suffolk District Medical Society will meet for the examination of candidates at the Medical Library, No. 8 The Fenway, Thursday, May 1, 1919, at 4 o'clock.

Candidates should make personal application to the Secretary and present their medical diploma at least two weeks before the examination.

GEORGE R. MINOT, M.D., *Secretary*.

ESSEX SOUTH DISTRICT MEDICAL SOCIETY.—The annual meeting of the Essex South District Medical Society will be held at the Relay House, Nahant, Wednesday, May 14, 1919, at 6.30 P.M.

Dr. Hugh Cabot will be the guest of the evening and will speak on the "Development of the Treatment of Wounds, 1916-1918."

DR. J. J. EGAN, *President*.

DR. H. P. BENNETT, *Secretary*.

CENSORS' MEETING.—The Censors of the Essex South District Medical Society will meet at the Salem Hospital, May 1, 1919, at 4 P.M., to examine candidates for admission to the Massachusetts Medical Society. Application blanks can be obtained from the Secretary, Dr. H. P. Bennett, 41 Lewis St., Lynn.

CENSORS' MEETING.—The Censors of the Essex North District Medical Society will meet for the examination of candidates at Hotel Bartlett, Main Street, Haverhill, Mass., Thursday, May 1, 1919, at 2 P.M. Candidates should make personal application to the Secretary and present their medical diploma at least two weeks before the examination.

J. FORREST BURNHAM, M.D., *Secretary*.